GenCore version 5.1.6

OM nucleic - nucleic search, using sw model

Run on: April 14, 2005, 16:47:11 ; Search time 0.001 Seconds
(without alignments)
1847.636 Million cell updates/sec

Title: US-10-672-866-3
Perfect score: 874
Sequence: 1 ctgcagcgtctggggtttcc.....tattaaaagaatccaaattc 874

Scoring table: IDENTITY_NUC
Gapop 10.0 , Gapext 0.5

Searched: 55 seqs, 1057 residues

Total number of hits satisfying chosen parameters: 110

Minimum DB seq length: 8
Maximum DB seq length: 50

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 55 summaries

Database : rni3.seq:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

	Result No.	Score	% Query Match	Length	DB	ID	Description
	1	28	3.2	28	1	US-08-859-998-1011	Sequence 1011, Ap
c	2	28	3.2	28	1	US-08-859-998-1012	Sequence 1012, Ap
	3	28	3.2	28	1	US-09-225-928-1011	Sequence 1011, Ap
c	4	28	3.2	28	1	US-09-225-928-1012	Sequence 1012, Ap
	5	28	3.2	28	1	US-09-225-201B-1011	Sequence 1011, Ap
c	6	28	3.2	28	1	US-09-225-201B-1012	Sequence 1012, Ap
c	7	24	2.7	24	1	US-08-023-980B-18	Sequence 18, Appl
c	8	24	2.7	24	1	US-08-486-953A-13	Sequence 13, Appl
c	9	24	2.7	24	1	US-08-204-052-13	Sequence 13, Appl
c	10	21.8	2.5	25	1	5290690-19	Patent No. 5290690
c	11	21.8	2.5	25	1	5290690-19	Patent No. 5290690
c	12	20	2.3	21	1	US-08-023-980B-5	Sequence 5, Appli
c	13	20	2.3	21	1	US-08-486-953A-5	Sequence 5, Appli
c	14	20	2.3	21	1	US-08-204-052-5	Sequence 5, Appli
c	15	17	1.9	21	1	US-08-023-980B-7	Sequence 7, Appli
c	16	17	1.9	21	1	US-08-486-953A-7	Sequence 7, Appli
c	17	17	1.9	21	1	US-08-204-052-7	Sequence 7, Appli
c	18	16.8	1.9	20	1	US-09-068-506-48	Sequence 48, Appl
	19	16.8	1.9	21	1	US-08-023-980B-10	Sequence 10, Appl
	20	16.8	1.9	21	1	US-08-486-953A-10	Sequence 10, Appl
	21	16.8	1.9	21	1	US-08-204-052-10	Sequence 10, Appl
	22	16	1.8	19	1	US-09-545-686-27	Sequence 27, Appl
c	23	14.4	1.6	17	1	US-08-412-614-102	Sequence 102, App
c	24	14.4	1.6	17	1	US-08-412-614-104	Sequence 104, App
c	25	14.4	1.6	17	1	US-08-635-761-102	Sequence 102, App
c	26	14.4	1.6	17	1	US-08-635-761-104	Sequence 104, App
c	27	14.4	1.6	17	1	US-09-312-520-102	Sequence 102, App
c	28	14.4	1.6	17	1	US-09-312-520-104	Sequence 104, App
c	29	14.4	1.6	17	1	US-09-863-086-102	Sequence 102, App
c	30	14.4	1.6	17	1	US-09-863-086-104	Sequence 104, App
	31	14	1.6	17	1	US-08-373-124A-962	Sequence 962, App
	32	14	1.6	17	1	US-08-373-124A-964	Sequence 964, App
	33	14	1.6	17	1	US-08-373-124A-966	Sequence 966, App
	34	14	1.6	17	1	US-08-435-628-962	Sequence 962, App
	35	14	1.6	17	1	US-08-435-628-964	Sequence 964, App
	36	14	1.6	17	1	US-08-435-628-966	Sequence 966, App
c	37	13.8	1.6	17	1	US-08-584-040-5950	Sequence 5950, Ap
c	38	13.8	1.6	17	1	US-09-371-772B-2787	Sequence 2787, Ap
c	39	13.8	1.6	17	1	US-09-371-772B-5100	Sequence 5100, Ap
	40	13.8	1.6	17	1	US-09-371-772B-6796	Sequence 6796, Ap
	41	13.8	1.6	17	1	US-09-866-108A-8960	Sequence 8960, Ap
c	42	13.8	1.6	17	1	US-09-685-664B-2787	Sequence 2787, Ap
c	43	13.4	1.5	16	1	US-09-371-772B-5942	Sequence 5942, Ap
	44	13	1.5	16	1	US-09-371-772B-7004	Sequence 7004, Ap
c	45	12.8	1.5	16	1	US-09-371-772B-5969	Sequence 5969, Ap
	46	12.8	1.5	16	1	US-09-371-772B-6103	Sequence 6103, Ap
c	47	12.4	1.4	15	1	US-08-311-760A-197	Sequence 197, App
c	48	12.4	1.4	15	1	US-08-363-240A-144	Sequence 144, App
c	49	12.4	1.4	15	1	US-08-363-240A-145	Sequence 145, App
c	50	12.4	1.4	15	1	US-08-774-310-197	Sequence 197, App
	51	12	1.4	15	1	US-08-319-492B-148	Sequence 148, App
c	52	12	1.4	15	1	US-08-363-240A-143	Sequence 143, App
c	53	12	1.4	15	1	US-08-635-309-24	Sequence 24, Appl
c	54	12	1.4	15	1	US-08-585-684B-2103	Sequence 2103, Ap
c	55	12	1.4	15	1	US-09-038-073-2103	Sequence 2103, Ap

ALIGNMENTS

RESULT 1
US-08-859-998-1011
; Sequence 1011, Application US/08859998
; Patent No. 5994076
; GENERAL INFORMATION:
; APPLICANT: Chenchik, Alex
; APPLICANT: Jokhadze, George
; APPLICANT: Bibilashvilli, Robert
; TITLE OF INVENTION: METHOD OF ASSAYING DIFFERENTIAL
; TITLE OF INVENTION: EXPRESSION
; NUMBER OF SEQUENCES: 1375
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Fish & Richardson, P.C.
; STREET: 2200 Sand Hill Road, Suite 100
; CITY: Menlo Park
; STATE: CA
; COUNTRY: US
; ZIP: 94025
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Diskette
; COMPUTER: IBM Compatible
; OPERATING SYSTEM: Windows95
; SOFTWARE: FastSEQ for Windows Version 2.0
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/859,998
; FILING DATE: 21-MAY-1997
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER:
; FILING DATE:
; ATTORNEY/AGENT INFORMATION:
; NAME: Field, Bret E.
; REGISTRATION NUMBER: 37,620
; REFERENCE/DOCKET NUMBER: 09096/002001
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 415-322-5070
; TELEFAX: 415-854-0875
; INFORMATION FOR SEQ ID NO: 1011:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 28 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA
; FEATURE:
; OTHER INFORMATION: oligonucleotide primer

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US-08-859-998-1011

  Query Match             3.2%;  Score 28;  DB 1;  Length 28;
  Best Local Similarity   100.0%;  Pred. No. 2.1;
  Matches   28;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        106 AGTGCAGGGCATCATCAATTTCGAGCAG 133
              ||||||||||||||||||||||||||||
Db          1 AGTGCAGGGCATCATCAATTTCGAGCAG 28


RESULT 2
US-08-859-998-1012/c
; Sequence 1012, Application US/08859998
; Patent No. 5994076
;  GENERAL INFORMATION:
;    APPLICANT:  Chenchik, Alex
;    APPLICANT:  Jokhadze, George
;    APPLICANT:  Bibilashvilli, Robert
;    TITLE OF INVENTION:  METHOD OF ASSAYING DIFFERENTIAL
;    TITLE OF INVENTION:  EXPRESSION
;    NUMBER OF SEQUENCES:  1375
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Fish & Richardson, P.C.
;      STREET:  2200 Sand Hill Road, Suite 100
;      CITY:  Menlo Park
;      STATE:  CA
;      COUNTRY:  US
;      ZIP:  94025
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Diskette
;      COMPUTER:  IBM Compatible
;      OPERATING SYSTEM:  Windows95
;      SOFTWARE:  FastSEQ for Windows Version 2.0
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/859,998
;      FILING DATE:  21-MAY-1997
;      CLASSIFICATION:  435
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:
;      FILING DATE:
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Field, Bret E.
;      REGISTRATION NUMBER:  37,620
;      REFERENCE/DOCKET NUMBER:  09096/002001
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  415-322-5070
;      TELEFAX:  415-854-0875
;  INFORMATION FOR SEQ ID NO:  1012:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  28 base pairs
;      TYPE:  nucleic acid
;      STRANDEDNESS:  single
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  DNA
;    FEATURE:
;      OTHER INFORMATION:  oligonucleotide primer
US-08-859-998-1012

  Query Match             3.2%;  Score 28;  DB 1;  Length 28;
  Best Local Similarity   100.0%;  Pred. No. 2.1;
  Matches   28;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        376 GATCTCACTCTCAGGAGACCATTGCATC 403
              ||||||||||||||||||||||||||||
Db         28 GATCTCACTCTCAGGAGACCATTGCATC 1


RESULT 3
US-09-225-928-1011
; Sequence 1011, Application US/09225928
; Patent No. 6352829
;  GENERAL INFORMATION:
;       APPLICANT: Chenchik, Alex
;                  Jokhadze, George
;                  Bibilashvilli, Robert
;       TITLE OF INVENTION: METHOD OF ASSAYING DIFFERENTIAL
;                           EXPRESSION
;       NUMBER OF SEQUENCES: 1375
;       CORRESPONDENCE ADDRESS:
;            ADDRESSEE: Fish & Richardson, P.C.
;            STREET: 2200 Sand Hill Road, Suite 100
;            CITY: Menlo Park
;            STATE: CA
;            COUNTRY: US
;            ZIP: 94025
;       COMPUTER READABLE FORM:
;            MEDIUM TYPE: Diskette
;            COMPUTER: IBM Compatible
;            OPERATING SYSTEM: Windows95
;            SOFTWARE: FastSEQ for Windows Version 2.0
;       CURRENT APPLICATION DATA:
;            APPLICATION NUMBER: US/09/225,928
;            FILING DATE: 05-Jan-1999
;            CLASSIFICATION: <Unknown>
;       PRIOR APPLICATION DATA:
;            APPLICATION NUMBER: 08/859,998
;            FILING DATE: 21-MAY-1997
;       ATTORNEY/AGENT INFORMATION:
;            NAME: Field, Bret E.
;            REGISTRATION NUMBER: 37,620
;            REFERENCE/DOCKET NUMBER: 09096/002001
;       TELECOMMUNICATION INFORMATION:
;            TELEPHONE: 415-322-5070
;            TELEFAX: 415-854-0875
;  INFORMATION FOR SEQ ID NO: 1011:
;       SEQUENCE CHARACTERISTICS:
;            LENGTH: 28 base pairs
;            TYPE: nucleic acid
;            STRANDEDNESS: single
;            TOPOLOGY: linear
;       MOLECULE TYPE: DNA
;       FEATURE:
;            OTHER INFORMATION:  oligonucleotide primer
;       SEQUENCE DESCRIPTION: SEQ ID NO: 1011:
US-09-225-928-1011

  Query Match             3.2%;  Score 28;  DB 1;  Length 28;
  Best Local Similarity   100.0%;  Pred. No. 2.1;
  Matches   28;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        106 AGTGCAGGGCATCATCAATTTCGAGCAG 133
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Db          1 AGTGCAGGGCATCATCAATTTCGAGCAG 28


RESULT 4
US-09-225-928-1012/c
; Sequence 1012, Application US/09225928
; Patent No. 6352829
;  GENERAL INFORMATION:
;       APPLICANT: Chenchik, Alex
;                  Jokhadze, George
;                  Bibilashvilli, Robert
;       TITLE OF INVENTION: METHOD OF ASSAYING DIFFERENTIAL
;                           EXPRESSION
;       NUMBER OF SEQUENCES: 1375
;       CORRESPONDENCE ADDRESS:
;            ADDRESSEE: Fish & Richardson, P.C.
;            STREET: 2200 Sand Hill Road, Suite 100
;            CITY: Menlo Park
;            STATE: CA
;            COUNTRY: US
;            ZIP: 94025
;       COMPUTER READABLE FORM:
;            MEDIUM TYPE: Diskette
;
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;            COMPUTER: IBM Compatible
;            OPERATING SYSTEM: Windows95
;            SOFTWARE: FastSEQ for Windows Version 2.0
;       CURRENT APPLICATION DATA:
;            APPLICATION NUMBER: US/09/225,928
;            FILING DATE: 05-Jan-1999
;            CLASSIFICATION: <Unknown>
;       PRIOR APPLICATION DATA:
;            APPLICATION NUMBER: 08/859,998
;            FILING DATE: 21-MAY-1997
;       ATTORNEY/AGENT INFORMATION:
;            NAME: Field, Bret E.
;            REGISTRATION NUMBER: 37,620
;            REFERENCE/DOCKET NUMBER: 09096/002001
;       TELECOMMUNICATION INFORMATION:
;            TELEPHONE: 415-322-5070
;            TELEFAX: 415-854-0875
;   INFORMATION FOR SEQ ID NO: 1012:
;       SEQUENCE CHARACTERISTICS:
;            LENGTH: 28 base pairs
;            TYPE: nucleic acid
;            STRANDEDNESS: single
;            TOPOLOGY: linear
;       MOLECULE TYPE: DNA
;       FEATURE:
;            OTHER INFORMATION:  oligonucleotide primer
;       SEQUENCE DESCRIPTION: SEQ ID NO: 1012:
US-09-225-928-1012

  Query Match             3.2%;  Score 28;  DB 1;  Length 28;
  Best Local Similarity   100.0%;  Pred. No. 2.1;
  Matches   28;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        376 GATCTCACTCTCAGGAGACCATTGCATC 403
              ||||||||||||||||||||||||||||
Db         28 GATCTCACTCTCAGGAGACCATTGCATC 1


RESULT 5
US-09-225-201B-1011
; Sequence 1011, Application US/09225201B
; Patent No. 6489455
;   GENERAL INFORMATION:
;       APPLICANT: Chenchik, Alex
;                  Jokhadze, George
;                  Bibilashvilli, Robert
;       TITLE OF INVENTION: METHOD OF ASSAYING DIFFERENTIAL
;                           EXPRESSION
;       NUMBER OF SEQUENCES: 1375
;       CORRESPONDENCE ADDRESS:
;            ADDRESSEE: Fish & Richardson, P.C.
;            STREET: 2200 Sand Hill Road, Suite 100
;            CITY: Menlo Park
;            STATE: CA
;            COUNTRY: US
;            ZIP: 94025
;       COMPUTER READABLE FORM:
;            MEDIUM TYPE: Diskette
;            COMPUTER: IBM Compatible
;            OPERATING SYSTEM: Windows95
;            SOFTWARE: FastSEQ for Windows Version 2.0
;       CURRENT APPLICATION DATA:
;            APPLICATION NUMBER: US/09/225,201B
;            FILING DATE: 05-Jan-1999
;            CLASSIFICATION: <Unknown>
;       PRIOR APPLICATION DATA:
;            APPLICATION NUMBER: US/08/859,998
;            FILING DATE: 21-MAY-1997
;       ATTORNEY/AGENT INFORMATION:
;            NAME: Field, Bret E.
;            REGISTRATION NUMBER: 37,620
;            REFERENCE/DOCKET NUMBER: 09096/002001
;       TELECOMMUNICATION INFORMATION:
;            TELEPHONE: 415-322-5070
;            TELEFAX: 415-854-0875
;   INFORMATION FOR SEQ ID NO: 1011:
;       SEQUENCE CHARACTERISTICS:
;            LENGTH: 28 base pairs
;            TYPE: nucleic acid
;            STRANDEDNESS: single
;            TOPOLOGY: linear
;       MOLECULE TYPE: DNA
;       FEATURE:
;            OTHER INFORMATION:  oligonucleotide primer
;       SEQUENCE DESCRIPTION: SEQ ID NO: 1011:
US-09-225-201B-1011

  Query Match             3.2%;  Score 28;  DB 1;  Length 28;
  Best Local Similarity   100.0%;  Pred. No. 2.1;
  Matches   28;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        106 AGTGCAGGGCATCATCAATTTCGAGCAG 133
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Db          1 AGTGCAGGGCATCATCAATTTCGAGCAG 28


RESULT 6
US-09-225-201B-1012/c
; Sequence 1012, Application US/09225201B
; Patent No. 6489455
;   GENERAL INFORMATION:
;       APPLICANT: Chenchik, Alex
;                  Jokhadze, George
;                  Bibilashvilli, Robert
;       TITLE OF INVENTION: METHOD OF ASSAYING DIFFERENTIAL
;                           EXPRESSION
;       NUMBER OF SEQUENCES: 1375
;       CORRESPONDENCE ADDRESS:
;            ADDRESSEE: Fish & Richardson, P.C.
;            STREET: 2200 Sand Hill Road, Suite 100
;            CITY: Menlo Park
;            STATE: CA
;            COUNTRY: US
;            ZIP: 94025
;       COMPUTER READABLE FORM:
;            MEDIUM TYPE: Diskette
;            COMPUTER: IBM Compatible
;            OPERATING SYSTEM: Windows95
;            SOFTWARE: FastSEQ for Windows Version 2.0
;       CURRENT APPLICATION DATA:
;            APPLICATION NUMBER: US/09/225,201B
;            FILING DATE: 05-Jan-1999
;            CLASSIFICATION: <Unknown>
;       PRIOR APPLICATION DATA:
;            APPLICATION NUMBER: US/08/859,998
;            FILING DATE: 21-MAY-1997
;       ATTORNEY/AGENT INFORMATION:
;            NAME: Field, Bret E.
;            REGISTRATION NUMBER: 37,620
;            REFERENCE/DOCKET NUMBER: 09096/002001
;       TELECOMMUNICATION INFORMATION:
;            TELEPHONE: 415-322-5070
;            TELEFAX: 415-854-0875
;   INFORMATION FOR SEQ ID NO: 1012:
;       SEQUENCE CHARACTERISTICS:
;            LENGTH: 28 base pairs
;            TYPE: nucleic acid
;            STRANDEDNESS: single
;            TOPOLOGY: linear
;       MOLECULE TYPE: DNA
;       FEATURE:
;            OTHER INFORMATION:  oligonucleotide primer
;       SEQUENCE DESCRIPTION: SEQ ID NO: 1012:
US-09-225-201B-1012

  Query Match             3.2%;  Score 28;  DB 1;  Length 28;
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  Best Local Similarity   100.0%;  Pred. No. 2.1;
  Matches   28;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        376 GATCTCACTCTCAGGAGACCATTGCATC 403
              ||||||||||||||||||||||||||||
Db         28 GATCTCACTCTCAGGAGACCATTGCATC 1


RESULT 7
US-08-023-980B-18/c
; Sequence 18, Application US/08023980B
; Patent No. 5843641
;  GENERAL INFORMATION:
;    APPLICANT:  Brown, Robert
;    APPLICANT:  Horvitz, H. Robert
;    APPLICANT:  Rosen, Daniel R.
;    TITLE OF INVENTION:  COMPOUNDS AND METHODS FOR THE DIAGNOSIS,
;    TITLE OF INVENTION:  TREATMENT AND PREVENTION OF DISEASES OF CELL DEATH
;    NUMBER OF SEQUENCES:  45
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Clark & Elbing LLP
;      STREET:  585 Commercial Street
;      CITY:  Boston
;      STATE:  MA
;      COUNTRY:  USA
;      ZIP:  02109-1024
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.30
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/023,980B
;      FILING DATE:  26-FEB-1993
;      CLASSIFICATION:  435
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Clark, Paul T.
;      REGISTRATION NUMBER:  30,162
;      REFERENCE/DOCKET NUMBER:  00786/177001
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  617/723-4123
;      TELEFAX:  617/723-8962
;      TELEX:
;  INFORMATION FOR SEQ ID NO:  18:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  24 base pairs
;      TYPE:  nucleic acid
;      STRANDEDNESS:  single
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  DNA
US-08-023-980B-18

  Query Match             2.7%;  Score 24;  DB 1;  Length 24;
  Best Local Similarity   100.0%;  Pred. No. 4.4;
  Matches   24;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        556 CCCTTAACTCATCTGTTATCCTGC 579
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Db         24 CCCTTAACTCATCTGTTATCCTGC 1


RESULT 8
US-08-486-953A-13/c
; Sequence 13, Application US/08486953A
; Patent No. 5849290
;  GENERAL INFORMATION:
;    APPLICANT:  Brown, Robert
;    APPLICANT:  Horvitz, H. Robert
;    APPLICANT:  Rosen, Daniel R.
;    TITLE OF INVENTION:  COMPOUNDS AND METHODS FOR THE DIAGNOSIS,
;    TITLE OF INVENTION:  TREATMENT AND PREVENTION OF DISEASES OF CELL DEATH
;    NUMBER OF SEQUENCES:  53
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Clark & Elbing LLP
;      STREET:  176 Federal Street
;      CITY:  Boston
;      STATE:  MA
;      COUNTRY:  USA
;      ZIP:  02110
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  FastSeq
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/486,953A
;      FILING DATE:  07-JUN-1995
;      CLASSIFICATION:  424
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  US 08/204,052
;      FILING DATE:  28-FEB-1994
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Clark, Paul T.
;      REGISTRATION NUMBER:  30,162
;      REFERENCE/DOCKET NUMBER:  00786/223002
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  617/428-0200
;      TELEFAX:  617/428-7045
;      TELEX:
;  INFORMATION FOR SEQ ID NO:  13:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  24 base pairs
;      TYPE:  nucleic acid
;      STRANDEDNESS:  single
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  DNA
US-08-486-953A-13

  Query Match             2.7%;  Score 24;  DB 1;  Length 24;
  Best Local Similarity   100.0%;  Pred. No. 4.4;
  Matches   24;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        556 CCCTTAACTCATCTGTTATCCTGC 579
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Db         24 CCCTTAACTCATCTGTTATCCTGC 1


RESULT 9
US-08-204-052-13/c
; Sequence 13, Application US/08204052
; Patent No. 6723893
;  GENERAL INFORMATION:
;    APPLICANT:  Brown, Robert
;    APPLICANT:  Horvitz, H. Robert
;    APPLICANT:  Rosen, Daniel R.
;    TITLE OF INVENTION:  COMPOUNDS AND METHODS FOR THE DIAGNOSIS,
;    TITLE OF INVENTION:  TREATMENT AND PREVENTION OF DISEASES OF CELL DEATH
;    NUMBER OF SEQUENCES:  53
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Fish & Richardson P.C.
;      STREET:  225 Franklin Street
;      CITY:  Boston
;      STATE:  MA
;      COUNTRY:  USA
;      ZIP:  02110-2804
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.30
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/204,052
;      FILING DATE:  28-FEB-1994
;      CLASSIFICATION:  800
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  US 08/023,980
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;      FILING DATE:  26-FEB-1993
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Clark, Paul T.
;      REGISTRATION NUMBER:  30,162
;      REFERENCE/DOCKET NUMBER:  00786/223001
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  617/542-5070
;      TELEFAX:  617/542-8906
;      TELEX:  200154
;  INFORMATION FOR SEQ ID NO:  13:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  24 base pairs
;      TYPE:  nucleic acid
;      STRANDEDNESS:  single
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  DNA
US-08-204-052-13

  Query Match             2.7%;  Score 24;  DB 1;  Length 24;
  Best Local Similarity   100.0%;  Pred. No. 4.4;
  Matches   24;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        556 CCCTTAACTCATCTGTTATCCTGC 579
              ||||||||||||||||||||||||
Db         24 CCCTTAACTCATCTGTTATCCTGC 1


RESULT 10
5290690-19/c
;Patent No. 5290690
;    APPLICANT: MRABET, NADIR;LASTERS, IGNACE;STANSSENS, PATRICK
;MATTHYSSENS, GASTON;WODAK, SHOSHANA;QUAX, WILHELMUS J.
;    TITLE OF INVENTION: METHODS AND MEANS FOR CONTROLLING THE
;STABILITY OF PROTEINS
;    NUMBER OF SEQUENCES: 22
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/07/398,706
;      FILING DATE: 25-AUG-1989
;SEQ ID NO:19:
;      LENGTH: 25
5290690-19

  Query Match             2.5%;  Score 21.8;  DB 1;  Length 25;
  Best Local Similarity   92.0%;  Pred. No. 8.2;
  Matches   23;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        418 GGTGGTCCATGAAAAAGCAGATGAC 442
              |||||| ||||||| ||||||||||
Db         25 GGTGGTTCATGAAAGAGCAGATGAC 1


RESULT 11
5290690-19/c
;Patent No. 5290690
;    APPLICANT: MRABET, NADIR;LASTERS, IGNACE;STANSSENS, PATRICK
;MATTHYSSENS, GASTON;WODAK, SHOSHANA;QUAX, WILHELMUS J.
;    TITLE OF INVENTION: METHODS AND MEANS FOR CONTROLLING THE
;STABILITY OF PROTEINS
;    NUMBER OF SEQUENCES: 22
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/07/398,706
;      FILING DATE: 25-AUG-1989
;SEQ ID NO:19:
;      LENGTH: 25
5290690-19

  Query Match             2.5%;  Score 21.8;  DB 1;  Length 25;
  Best Local Similarity   92.0%;  Pred. No. 8.2;
  Matches   23;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        418 GGTGGTCCATGAAAAAGCAGATGAC 442
              |||||| ||||||| ||||||||||
Db         25 GGTGGTTCATGAAAGAGCAGATGAC 1


RESULT 12
US-08-023-980B-5/c
; Sequence 5, Application US/08023980B
; Patent No. 5843641
;  GENERAL INFORMATION:
;    APPLICANT:  Brown, Robert
;    APPLICANT:  Horvitz, H. Robert
;    APPLICANT:  Rosen, Daniel R.
;    TITLE OF INVENTION:  COMPOUNDS AND METHODS FOR THE DIAGNOSIS,
;    TITLE OF INVENTION:  TREATMENT AND PREVENTION OF DISEASES OF CELL DEATH
;    NUMBER OF SEQUENCES:  45
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Clark & Elbing LLP
;      STREET:  585 Commercial Street
;      CITY:  Boston
;      STATE:  MA
;      COUNTRY:  USA
;      ZIP:  02109-1024
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.30
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/023,980B
;      FILING DATE:  26-FEB-1993
;      CLASSIFICATION:  435
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Clark, Paul T.
;      REGISTRATION NUMBER:  30,162
;      REFERENCE/DOCKET NUMBER:  00786/177001
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  617/723-4123
;      TELEFAX:  617/723-8962
;      TELEX:
;  INFORMATION FOR SEQ ID NO:  5:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  21 base pairs
;      TYPE:  nucleic acid
;      STRANDEDNESS:  single
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  DNA
US-08-023-980B-5

  Query Match             2.3%;  Score 20;  DB 1;  Length 21;
  Best Local Similarity   100.0%;  Pred. No. 9.5;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        118 CATCAATTTCGAGCAGAAGG 137
              ||||||||||||||||||||
Db         21 CATCAATTTCGAGCAGAAGG 2


RESULT 13
US-08-486-953A-5/c
; Sequence 5, Application US/08486953A
; Patent No. 5849290
;  GENERAL INFORMATION:
;    APPLICANT:  Brown, Robert
;    APPLICANT:  Horvitz, H. Robert
;    APPLICANT:  Rosen, Daniel R.
;    TITLE OF INVENTION:  COMPOUNDS AND METHODS FOR THE DIAGNOSIS,
;    TITLE OF INVENTION:  TREATMENT AND PREVENTION OF DISEASES OF CELL DEATH
;    NUMBER OF SEQUENCES:  53
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Clark & Elbing LLP
;      STREET:  176 Federal Street
;      CITY:  Boston
;      STATE:  MA
;      COUNTRY:  USA
;      ZIP:  02110
```

```
;     COMPUTER READABLE FORM:
;       MEDIUM TYPE:  Floppy disk
;       COMPUTER:  IBM PC compatible
;       OPERATING SYSTEM:  PC-DOS/MS-DOS
;       SOFTWARE:  FastSeq
;     CURRENT APPLICATION DATA:
;       APPLICATION NUMBER:  US/08/486,953A
;       FILING DATE:  07-JUN-1995
;       CLASSIFICATION:  424
;     PRIOR APPLICATION DATA:
;       APPLICATION NUMBER:  US 08/204,052
;       FILING DATE:  28-FEB-1994
;     ATTORNEY/AGENT INFORMATION:
;       NAME:  Clark, Paul T.
;       REGISTRATION NUMBER:  30,162
;       REFERENCE/DOCKET NUMBER:  00786/223002
;     TELECOMMUNICATION INFORMATION:
;       TELEPHONE:  617/428-0200
;       TELEFAX:  617/428-7045
;       TELEX:
;   INFORMATION FOR SEQ ID NO:  5:
;     SEQUENCE CHARACTERISTICS:
;       LENGTH:  21 base pairs
;       TYPE:  nucleic acid
;       STRANDEDNESS:  single
;       TOPOLOGY:  linear
;     MOLECULE TYPE:  DNA
US-08-486-953A-5

  Query Match             2.3%;  Score 20;  DB 1;  Length 21;
  Best Local Similarity   100.0%;  Pred. No. 9.5;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        118 CATCAATTTCGAGCAGAAGG 137
              ||||||||||||||||||||
Db         21 CATCAATTTCGAGCAGAAGG 2


RESULT 14
US-08-204-052-5/c
; Sequence 5, Application US/08204052
; Patent No. 6723893
;  GENERAL INFORMATION:
;    APPLICANT:  Brown, Robert
;    APPLICANT:  Horvitz, H. Robert
;    APPLICANT:  Rosen, Daniel R.
;    TITLE OF INVENTION:  COMPOUNDS AND METHODS FOR THE DIAGNOSIS,
;    TITLE OF INVENTION:  TREATMENT AND PREVENTION OF DISEASES OF CELL DEATH
;    NUMBER OF SEQUENCES:  53
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Fish & Richardson P.C.
;      STREET:  225 Franklin Street
;      CITY:  Boston
;      STATE:  MA
;      COUNTRY:  USA
;      ZIP:  02110-2804
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.30
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/204,052
;      FILING DATE:  28-FEB-1994
;      CLASSIFICATION:  800
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  US 08/023,980
;      FILING DATE:  26-FEB-1993
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Clark, Paul T.
;      REGISTRATION NUMBER:  30,162
;      REFERENCE/DOCKET NUMBER:  00786/223001
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  617/542-5070
;      TELEFAX:  617/542-8906
;      TELEX:  200154
;  INFORMATION FOR SEQ ID NO:  5:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  21 base pairs
;      TYPE:  nucleic acid
;      STRANDEDNESS:  single
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  DNA
US-08-204-052-5

  Query Match             2.3%;  Score 20;  DB 1;  Length 21;
  Best Local Similarity   100.0%;  Pred. No. 9.5;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        118 CATCAATTTCGAGCAGAAGG 137
              ||||||||||||||||||||
Db         21 CATCAATTTCGAGCAGAAGG 2


RESULT 15
US-08-023-980B-7/c
; Sequence 7, Application US/08023980B
; Patent No. 5843641
;  GENERAL INFORMATION:
;    APPLICANT:  Brown, Robert
;    APPLICANT:  Horvitz, H. Robert
;    APPLICANT:  Rosen, Daniel R.
;    TITLE OF INVENTION:  COMPOUNDS AND METHODS FOR THE DIAGNOSIS,
;    TITLE OF INVENTION:  TREATMENT AND PREVENTION OF DISEASES OF CELL DEATH
;    NUMBER OF SEQUENCES:  45
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Clark & Elbing LLP
;      STREET:  585 Commercial Street
;      CITY:  Boston
;      STATE:  MA
;      COUNTRY:  USA
;      ZIP:  02109-1024
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.30
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/023,980B
;      FILING DATE:  26-FEB-1993
;      CLASSIFICATION:  435
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Clark, Paul T.
;      REGISTRATION NUMBER:  30,162
;      REFERENCE/DOCKET NUMBER:  00786/177001
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  617/723-4123
;      TELEFAX:  617/723-8962
;      TELEX:
;  INFORMATION FOR SEQ ID NO:  7:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  21 base pairs
;      TYPE:  nucleic acid
;      STRANDEDNESS:  single
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  DNA
US-08-023-980B-7

  Query Match             1.9%;  Score 17;  DB 1;  Length 21;
  Best Local Similarity   100.0%;  Pred. No. 20;
  Matches   17;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        218 GGAGATAATACAGCAGG 234
              |||||||||||||||||
Db         21 GGAGATAATACAGCAGG 5
```

```
RESULT 16
US-08-486-953A-7/c
; Sequence 7, Application US/08486953A
; Patent No. 5849290
;  GENERAL INFORMATION:
;    APPLICANT:  Brown, Robert
;    APPLICANT:  Horvitz, H. Robert
;    APPLICANT:  Rosen, Daniel R.
;    TITLE OF INVENTION:  COMPOUNDS AND METHODS FOR THE DIAGNOSIS,
;    TITLE OF INVENTION:  TREATMENT AND PREVENTION OF DISEASES OF CELL DEATH
;    NUMBER OF SEQUENCES:  53
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Clark & Elbing LLP
;      STREET:  176 Federal Street
;      CITY:  Boston
;      STATE:  MA
;      COUNTRY:  USA
;      ZIP:  02110
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  FastSeq
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/486,953A
;      FILING DATE:  07-JUN-1995
;      CLASSIFICATION:  424
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  US 08/204,052
;      FILING DATE:  28-FEB-1994
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Clark, Paul T.
;      REGISTRATION NUMBER:  30,162
;      REFERENCE/DOCKET NUMBER:  00786/223002
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  617/428-0200
;      TELEFAX:  617/428-7045
;      TELEX:
;  INFORMATION FOR SEQ ID NO:  7:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  21 base pairs
;      TYPE:  nucleic acid
;      STRANDEDNESS:  single
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  DNA
US-08-486-953A-7

  Query Match             1.9%;  Score 17;  DB 1;  Length 21;
  Best Local Similarity   100.0%;  Pred. No. 20;
  Matches   17;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        218 GGAGATAATACAGCAGG 234
              |||||||||||||||||
Db         21 GGAGATAATACAGCAGG 5


RESULT 17
US-08-204-052-7/c
; Sequence 7, Application US/08204052
; Patent No. 6723893
;  GENERAL INFORMATION:
;    APPLICANT:  Brown, Robert
;    APPLICANT:  Horvitz, H. Robert
;    APPLICANT:  Rosen, Daniel R.
;    TITLE OF INVENTION:  COMPOUNDS AND METHODS FOR THE DIAGNOSIS,
;    TITLE OF INVENTION:  TREATMENT AND PREVENTION OF DISEASES OF CELL DEATH
;    NUMBER OF SEQUENCES:  53
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Fish & Richardson P.C.
;      STREET:  225 Franklin Street
;      CITY:  Boston
;      STATE:  MA
;      COUNTRY:  USA
;      ZIP:  02110-2804
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.30
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/204,052
;      FILING DATE:  28-FEB-1994
;      CLASSIFICATION:  800
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  US 08/023,980
;      FILING DATE:  26-FEB-1993
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Clark, Paul T.
;      REGISTRATION NUMBER:  30,162
;      REFERENCE/DOCKET NUMBER:  00786/223001
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  617/542-5070
;      TELEFAX:  617/542-8906
;      TELEX:  200154
;  INFORMATION FOR SEQ ID NO:  7:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  21 base pairs
;      TYPE:  nucleic acid
;      STRANDEDNESS:  single
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  DNA
US-08-204-052-7

  Query Match             1.9%;  Score 17;  DB 1;  Length 21;
  Best Local Similarity   100.0%;  Pred. No. 20;
  Matches   17;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        218 GGAGATAATACAGCAGG 234
              |||||||||||||||||
Db         21 GGAGATAATACAGCAGG 5


RESULT 18
US-09-068-506-48/c
; Sequence 48, Application US/09068506A
; Patent No. 6569618
; GENERAL INFORMATION:
;  APPLICANT: YASUE, Hirofumi
;  APPLICANT: YOSHIMURA, Kumamoto
;  TITLE OF INVENTION: DIAGNOSIS OF DISEASES ASSOCIATED WITH CORONARY
;  TITLE OF INVENTION: TWITCHING
;  FILE REFERENCE: 0032-245P
;  CURRENT APPLICATION NUMBER: US/09/068,506A
;  CURRENT FILING DATE: 1998-07-10
;  NUMBER OF SEQ ID NOS: 72
;  SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 48
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Description of Artificial Sequence: Synthetic
;   OTHER INFORMATION: Primers
US-09-068-506-48

  Query Match             1.9%;  Score 16.8;  DB 1;  Length 20;
  Best Local Similarity   90.0%;  Pred. No. 19;
  Matches   18;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        168 GCATTAAAGGACTGACTGAA 187
              ||| |||||||||| |||||
Db         20 GCACTAAAGGACTGCCTGAA 1


RESULT 19
```

```
US-08-023-980B-10
; Sequence 10, Application US/08023980B
; Patent No. 5843641
;  GENERAL INFORMATION:
;    APPLICANT:  Brown, Robert
;    APPLICANT:  Horvitz, H. Robert
;    APPLICANT:  Rosen, Daniel R.
;    TITLE OF INVENTION:  COMPOUNDS AND METHODS FOR THE DIAGNOSIS,
;    TITLE OF INVENTION:  TREATMENT AND PREVENTION OF DISEASES OF CELL DEATH
;    NUMBER OF SEQUENCES:  45
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Clark & Elbing LLP
;      STREET:  585 Commercial Street
;      CITY:  Boston
;      STATE:  MA
;      COUNTRY:  USA
;      ZIP:  02109-1024
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.30
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/023,980B
;      FILING DATE:  26-FEB-1993
;      CLASSIFICATION:  435
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Clark, Paul T.
;      REGISTRATION NUMBER:  30,162
;      REFERENCE/DOCKET NUMBER:  00786/177001
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  617/723-4123
;      TELEFAX:  617/723-8962
;      TELEX:
;  INFORMATION FOR SEQ ID NO:  10:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  21 base pairs
;      TYPE:  nucleic acid
;      STRANDEDNESS:  single
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  DNA
US-08-023-980B-10

  Query Match             1.9%;  Score 16.8;  DB 1;  Length 21;
  Best Local Similarity   90.0%;  Pred. No. 21;
  Matches   18;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        298 AGAGAGGCATGTTGGAGACT 317
              | | ||||||||||||||||
Db          2 ATATAGGCATGTTGGAGACT 21


RESULT 20
US-08-486-953A-10
; Sequence 10, Application US/08486953A
; Patent No. 5849290
;  GENERAL INFORMATION:
;    APPLICANT:  Brown, Robert
;    APPLICANT:  Horvitz, H. Robert
;    APPLICANT:  Rosen, Daniel R.
;    TITLE OF INVENTION:  COMPOUNDS AND METHODS FOR THE DIAGNOSIS,
;    TITLE OF INVENTION:  TREATMENT AND PREVENTION OF DISEASES OF CELL DEATH
;    NUMBER OF SEQUENCES:  53
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Clark & Elbing LLP
;      STREET:  176 Federal Street
;      CITY:  Boston
;      STATE:  MA
;      COUNTRY:  USA
;      ZIP:  02110
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  FastSeq
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/486,953A
;      FILING DATE:  07-JUN-1995
;      CLASSIFICATION:  424
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  US 08/204,052
;      FILING DATE:  28-FEB-1994
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Clark, Paul T.
;      REGISTRATION NUMBER:  30,162
;      REFERENCE/DOCKET NUMBER:  00786/223002
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  617/428-0200
;      TELEFAX:  617/428-7045
;      TELEX:
;  INFORMATION FOR SEQ ID NO:  10:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  21 base pairs
;      TYPE:  nucleic acid
;      STRANDEDNESS:  single
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  DNA
US-08-486-953A-10

  Query Match             1.9%;  Score 16.8;  DB 1;  Length 21;
  Best Local Similarity   90.0%;  Pred. No. 21;
  Matches   18;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        298 AGAGAGGCATGTTGGAGACT 317
              | | ||||||||||||||||
Db          2 ATATAGGCATGTTGGAGACT 21


RESULT 21
US-08-204-052-10
; Sequence 10, Application US/08204052
; Patent No. 6723893
;  GENERAL INFORMATION:
;    APPLICANT:  Brown, Robert
;    APPLICANT:  Horvitz, H. Robert
;    APPLICANT:  Rosen, Daniel R.
;    TITLE OF INVENTION:  COMPOUNDS AND METHODS FOR THE DIAGNOSIS,
;    TITLE OF INVENTION:  TREATMENT AND PREVENTION OF DISEASES OF CELL DEATH
;    NUMBER OF SEQUENCES:  53
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Fish & Richardson P.C.
;      STREET:  225 Franklin Street
;      CITY:  Boston
;      STATE:  MA
;      COUNTRY:  USA
;      ZIP:  02110-2804
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.30
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/204,052
;      FILING DATE:  28-FEB-1994
;      CLASSIFICATION:  800
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  US 08/023,980
;      FILING DATE:  26-FEB-1993
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Clark, Paul T.
;      REGISTRATION NUMBER:  30,162
;      REFERENCE/DOCKET NUMBER:  00786/223001
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  617/542-5070
;      TELEFAX:  617/542-8906
;      TELEX:  200154
```

```
;  INFORMATION FOR SEQ ID NO:  10:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  21 base pairs
;      TYPE:  nucleic acid
;      STRANDEDNESS:  single
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  DNA
US-08-204-052-10

  Query Match             1.9%;  Score 16.8;  DB 1;  Length 21;
  Best Local Similarity   90.0%;  Pred. No. 21;
  Matches   18;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        298 AGAGAGGCATGTTGGAGACT 317
              | | ||||||||||||||||
Db          2 ATATAGGCATGTTGGAGACT 21


RESULT 22
US-09-545-686-27
; Sequence 27, Application US/09545686
; Patent No. 6441273
; GENERAL INFORMATION:
;  APPLICANT:  Aldwinckle, Herbert S.
;  APPLICANT:  Gaitan, Alvaro L.
;  TITLE OF INVENTION:  CONSTITUTIVE AND INDUCIBLE PROMOTERS FROM COFFEE PLANTS
;  FILE REFERENCE:  19603/3261
;  CURRENT APPLICATION NUMBER: US/09/545,686
;  CURRENT FILING DATE:  2000-04-07
;  PRIOR APPLICATION NUMBER:  60/180,934
;  PRIOR FILING DATE:  2000-02-08
;  NUMBER OF SEQ ID NOS:  40
;  SOFTWARE:  PatentIn Ver. 2.1
; SEQ ID NO 27
;   LENGTH: 19
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Description of Artificial Sequence:  Synthetic
;   OTHER INFORMATION: Oligonucleotide Primer
;   NAME/KEY: unsure
;   LOCATION: (5)
;   OTHER INFORMATION: N at any position in this sequence is either A, C,
;   OTHER INFORMATION: G, or T.
US-09-545-686-27

  Query Match             1.8%;  Score 16;  DB 1;  Length 19;
  Best Local Similarity   88.9%;  Pred. No. 21;
  Matches   16;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        195 ATGGATTCCATGTTCATG 212
              |||| |||||||| ||||
Db          1 ATGGNTTCCATGTNCATG 18


RESULT 23
US-08-412-614-102/c
; Sequence 102, Application US/08412614
; Patent No. 5536638
;  GENERAL INFORMATION:
;    APPLICANT:  Rossau, Rudi
;    APPLICANT:  Van Heuverswyn, Hugo
;    TITLE OF INVENTION:  Hybridization Probes Derived from the
;    TITLE OF INVENTION:  Spacer Region Between the 16S and 23S rRNA Genes for the
;    TITLE OF INVENTION:  Detection of No. 5536638-Viral Microorganisms
;    NUMBER OF SEQUENCES:  104
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Merchant & Gould
;      STREET:  3100 No. 5536638west Center
;      CITY:  Minneapolis
;      STATE:  MN
;      COUNTRY:  USA
;      ZIP:  55402-4131
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Diskette 3.5 inch, 1.44 mb capacity
;      COMPUTER:  IBM PC compatible (Compaq Deskpro 286e)
;      OPERATING SYSTEM:  MS-DOS
;      SOFTWARE:  Wordperfect Version #5.1
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/412,614
;      FILING DATE:
;      CLASSIFICATION:  435
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  07/965,394
;      FILING DATE:  17-DEC-1992
;      APPLICATION NUMBER:  PCT/EP91/00743
;      FILING DATE:  18-APR-1991
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  GB/90901054.3
;      FILING DATE:  18-APR-1990
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Hillson, Randall A.
;      REGISTRATION NUMBER:  31,838
;      REFERENCE/DOCKET NUMBER:  8076.75-USWO
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  612-332-5300
;      TELEFAX:  612-332-9081
;  INFORMATION FOR SEQ ID NO:  102:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  17 base pairs
;      TYPE:  nucleic acid
;      STRANDEDNESS:  single
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  DNA (genomic)
US-08-412-614-102

  Query Match             1.6%;  Score 14.4;  DB 1;  Length 17;
  Best Local Similarity   93.8%;  Pred. No. 26;
  Matches   15;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy         67 GGCGACGAAGGCCGTG 82
              ||||||||||| ||||
Db         16 GGCGACGAAGGACGTG 1


RESULT 24
US-08-412-614-104/c
; Sequence 104, Application US/08412614
; Patent No. 5536638
;  GENERAL INFORMATION:
;    APPLICANT:  Rossau, Rudi
;    APPLICANT:  Van Heuverswyn, Hugo
;    TITLE OF INVENTION:  Hybridization Probes Derived from the
;    TITLE OF INVENTION:  Spacer Region Between the 16S and 23S rRNA Genes for the
;    TITLE OF INVENTION:  Detection of No. 5536638-Viral Microorganisms
;    NUMBER OF SEQUENCES:  104
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Merchant & Gould
;      STREET:  3100 No. 5536638west Center
;      CITY:  Minneapolis
;      STATE:  MN
;      COUNTRY:  USA
;      ZIP:  55402-4131
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Diskette 3.5 inch, 1.44 mb capacity
;      COMPUTER:  IBM PC compatible (Compaq Deskpro 286e)
;      OPERATING SYSTEM:  MS-DOS
;      SOFTWARE:  Wordperfect Version #5.1
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/412,614
;      FILING DATE:
;      CLASSIFICATION:  435
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  07/965,394
;      FILING DATE:  17-DEC-1992
;      APPLICATION NUMBER:  PCT/EP91/00743
```

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;      FILING DATE:  18-APR-1991
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  GB/90901054.3
;      FILING DATE:  18-APR-1990
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Hillson, Randall A.
;      REGISTRATION NUMBER:  31,838
;      REFERENCE/DOCKET NUMBER:  8076.75-USWO
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  612-332-5300
;      TELEFAX:  612-332-9081
;  INFORMATION FOR SEQ ID NO:  104:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  17 base pairs
;      TYPE:  nucleic acid
;      STRANDEDNESS:  single
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  DNA (genomic)
US-08-412-614-104

  Query Match             1.6%;  Score 14.4;  DB 1;  Length 17;
  Best Local Similarity   93.8%;  Pred. No. 26;
  Matches   15;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy         67 GGCGACGAAGGCCGTG 82
              ||||||||||| ||||
Db         16 GGCGACGAAGGACGTG 1


RESULT 25
US-08-635-761-102/c
; Sequence 102, Application US/08635761
; Patent No. 5945282
;  GENERAL INFORMATION:
;    APPLICANT:  Rossau, Rudi
;    TITLE OF INVENTION:  HYBRIDIZATION PROBES DERIVED FROM THE SPACER REGION BE
;    NUMBER OF SEQUENCES:  104
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Merchant, Gould, Smith, Edell, Welter & Schmidt
;      STREET:  3100 No. 5945282west Center, 90 S. 7th Street
;      CITY:  Minneapolis
;      STATE:  MN
;      COUNTRY:  U.S.A.
;      ZIP:  55402
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Diskette
;      COMPUTER:  IBM Compatible
;      OPERATING SYSTEM:  DOS
;      SOFTWARE:  FastSEQ Version 1.5
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/635,761
;      FILING DATE:  19-APR-1996
;      CLASSIFICATION:  435
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  07/965,394
;      FILING DATE:  17-DEC-1992
;      APPLICATION NUMBER:  08/412,614
;      FILING DATE:  29-MAR-1995
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Hillson, Randall A
;      REGISTRATION NUMBER:  31,838
;      REFERENCE/DOCKET NUMBER:  8076.75USC1
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  612/332-5300
;      TELEFAX:  612/332/9081
;      TELEX:
;  INFORMATION FOR SEQ ID NO:  102:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  17 base pairs
;      TYPE:  nucleic acid
;      STRANDEDNESS:  single
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  Genomic DNA
;    HYPOTHETICAL:  NO
;    ANTI-SENSE:  NO
;    FRAGMENT TYPE:
;    ORIGINAL SOURCE:
US-08-635-761-102

  Query Match             1.6%;  Score 14.4;  DB 1;  Length 17;
  Best Local Similarity   93.8%;  Pred. No. 26;
  Matches   15;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy         67 GGCGACGAAGGCCGTG 82
              ||||||||||| ||||
Db         16 GGCGACGAAGGACGTG 1


RESULT 26
US-08-635-761-104/c
; Sequence 104, Application US/08635761
; Patent No. 5945282
;  GENERAL INFORMATION:
;    APPLICANT:  Rossau, Rudi
;    TITLE OF INVENTION:  HYBRIDIZATION PROBES DERIVED FROM THE SPACER REGION BE
;    NUMBER OF SEQUENCES:  104
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Merchant, Gould, Smith, Edell, Welter & Schmidt
;      STREET:  3100 No. 5945282west Center, 90 S. 7th Street
;      CITY:  Minneapolis
;      STATE:  MN
;      COUNTRY:  U.S.A.
;      ZIP:  55402
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Diskette
;      COMPUTER:  IBM Compatible
;      OPERATING SYSTEM:  DOS
;      SOFTWARE:  FastSEQ Version 1.5
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/635,761
;      FILING DATE:  19-APR-1996
;      CLASSIFICATION:  435
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  07/965,394
;      FILING DATE:  17-DEC-1992
;      APPLICATION NUMBER:  08/412,614
;      FILING DATE:  29-MAR-1995
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Hillson, Randall A
;      REGISTRATION NUMBER:  31,838
;      REFERENCE/DOCKET NUMBER:  8076.75USC1
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  612/332-5300
;      TELEFAX:  612/332/9081
;      TELEX:
;  INFORMATION FOR SEQ ID NO:  104:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  17 base pairs
;      TYPE:  nucleic acid
;      STRANDEDNESS:  both
;      TOPOLOGY:  both
;    MOLECULE TYPE:  Genomic DNA
;    HYPOTHETICAL:  NO
;    ANTI-SENSE:  NO
;    FRAGMENT TYPE:
;    ORIGINAL SOURCE:
US-08-635-761-104

  Query Match             1.6%;  Score 14.4;  DB 1;  Length 17;
  Best Local Similarity   93.8%;  Pred. No. 26;
  Matches   15;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy         67 GGCGACGAAGGCCGTG 82
              ||||||||||| ||||
Db         16 GGCGACGAAGGACGTG 1
```

```
RESULT 27
US-09-312-520-102/c
; Sequence 102, Application US/09312520
; Patent No. 6277577
;  GENERAL INFORMATION:
;    APPLICANT:  Rossau, Rudi
;    TITLE OF INVENTION:  HYBRIDIZATION PROBES DERIVED FROM THE SPACER REGION BE
;    NUMBER OF SEQUENCES:  104
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Merchant, Gould, Smith, Edell, Welter & Schmidt
;      STREET:  3100 No. 6277577west Center, 90 S. 7th Street
;      CITY:  Minneapolis
;      STATE:  MN
;      COUNTRY:  U.S.A.
;      ZIP:  55402
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Diskette
;      COMPUTER:  IBM Compatible
;      OPERATING SYSTEM:  DOS
;      SOFTWARE:  FastSEQ Version 1.5
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/09/312,520
;      FILING DATE:  19-APR-1996
;      CLASSIFICATION:  435
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  07/965,394
;      FILING DATE:  17-DEC-1992
;      APPLICATION NUMBER:  08/412,614
;      FILING DATE:  29-MAR-1995
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Hillson, Randall A
;      REGISTRATION NUMBER:  31,838
;      REFERENCE/DOCKET NUMBER:  8076.75USC1
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  612/332-5300
;      TELEFAX:  612/332/9081
;      TELEX:
;  INFORMATION FOR SEQ ID NO:  102:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  17 base pairs
;      TYPE:  nucleic acid
;      STRANDEDNESS:  single
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  Genomic DNA
;    HYPOTHETICAL:  NO
;    ANTI-SENSE:  NO
;    FRAGMENT TYPE:
;    ORIGINAL SOURCE:
US-09-312-520-102

  Query Match             1.6%;  Score 14.4;  DB 1;  Length 17;
  Best Local Similarity   93.8%;  Pred. No. 26;
  Matches   15;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy         67 GGCGACGAAGGCCGTG 82
              ||||||||||| ||||
Db         16 GGCGACGAAGGACGTG 1


RESULT 28
US-09-312-520-104/c
; Sequence 104, Application US/09312520
; Patent No. 6277577
;  GENERAL INFORMATION:
;    APPLICANT:  Rossau, Rudi
;    TITLE OF INVENTION:  HYBRIDIZATION PROBES DERIVED FROM THE SPACER REGION BE
;    NUMBER OF SEQUENCES:  104
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Merchant, Gould, Smith, Edell, Welter & Schmidt
;      STREET:  3100 No. 6277577west Center, 90 S. 7th Street
;      CITY:  Minneapolis
;      STATE:  MN
;      COUNTRY:  U.S.A.
;      ZIP:  55402
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Diskette
;      COMPUTER:  IBM Compatible
;      OPERATING SYSTEM:  DOS
;      SOFTWARE:  FastSEQ Version 1.5
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/09/312,520
;      FILING DATE:  19-APR-1996
;      CLASSIFICATION:  435
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  07/965,394
;      FILING DATE:  17-DEC-1992
;      APPLICATION NUMBER:  08/412,614
;      FILING DATE:  29-MAR-1995
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Hillson, Randall A
;      REGISTRATION NUMBER:  31,838
;      REFERENCE/DOCKET NUMBER:  8076.75USC1
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  612/332-5300
;      TELEFAX:  612/332/9081
;      TELEX:
;  INFORMATION FOR SEQ ID NO:  104:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  17 base pairs
;      TYPE:  nucleic acid
;      STRANDEDNESS:  both
;      TOPOLOGY:  both
;    MOLECULE TYPE:  Genomic DNA
;    HYPOTHETICAL:  NO
;    ANTI-SENSE:  NO
;    FRAGMENT TYPE:
;    ORIGINAL SOURCE:
US-09-312-520-104

  Query Match             1.6%;  Score 14.4;  DB 1;  Length 17;
  Best Local Similarity   93.8%;  Pred. No. 26;
  Matches   15;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy         67 GGCGACGAAGGCCGTG 82
              ||||||||||| ||||
Db         16 GGCGACGAAGGACGTG 1


RESULT 29
US-09-863-086-102/c
; Sequence 102, Application US/09863086
; Patent No. 6656689
;  GENERAL INFORMATION:
;       APPLICANT: Rossau, Rudi
;       TITLE OF INVENTION: HYBRIDIZATION PROBES DERIVED FROM THE SPACER
;                           REGION BETWEEN THE 16S A
;       NUMBER OF SEQUENCES: 104
;       CORRESPONDENCE ADDRESS:
;            ADDRESSEE: Merchant, Gould, Smith, Edell, Welter & Schmidt
;            STREET: 3100 No. 6656689west Center, 90 S. 7th Street
;            CITY: Minneapolis
;            STATE: MN
;            COUNTRY: U.S.A.
;            ZIP: 55402
;       COMPUTER READABLE FORM:
;            MEDIUM TYPE: Diskette
;            COMPUTER: IBM Compatible
;            OPERATING SYSTEM: DOS
;            SOFTWARE: FastSEQ Version 1.5
;       CURRENT APPLICATION DATA:
;            APPLICATION NUMBER: US/09/863,086
;            FILING DATE: 22-May-2001
;            CLASSIFICATION: <Unknown>
;       PRIOR APPLICATION DATA:
;            APPLICATION NUMBER: 09/312,520
```

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;              FILING DATE: <Unknown>
;              APPLICATION NUMBER: 08/412,614
;              FILING DATE: 29-MAR-1995
;         ATTORNEY/AGENT INFORMATION:
;              NAME: Hillson, Randall A
;              REGISTRATION NUMBER: 31,838
;              REFERENCE/DOCKET NUMBER: 8076.75USC1
;         TELECOMMUNICATION INFORMATION:
;              TELEPHONE: 612/332-5300
;              TELEFAX: 612/332/9081
;              TELEX: <Unknown>
;    INFORMATION FOR SEQ ID NO: 102:
;         SEQUENCE CHARACTERISTICS:
;              LENGTH: 17 base pairs
;              TYPE: nucleic acid
;              STRANDEDNESS: single
;              TOPOLOGY: linear
;         MOLECULE TYPE: Genomic DNA
;         HYPOTHETICAL: NO
;         ANTI-SENSE: NO
;         FRAGMENT TYPE: <Unknown>
;         ORIGINAL SOURCE:
;         SEQUENCE DESCRIPTION: SEQ ID NO: 102:
US-09-863-086-102

  Query Match             1.6%;  Score 14.4;  DB 1;  Length 17;
  Best Local Similarity   93.8%;  Pred. No. 26;
  Matches   15;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy         67 GGCGACGAAGGCCGTG 82
              ||||||||||| ||||
Db         16 GGCGACGAAGGACGTG 1


RESULT 30
US-09-863-086-104/c
; Sequence 104, Application US/09863086
; Patent No. 6656689
;  GENERAL INFORMATION:
;       APPLICANT: Rossau, Rudi
;       TITLE OF INVENTION: HYBRIDIZATION PROBES DERIVED FROM THE SPACER
;                           REGION BETWEEN THE 16S A
;       NUMBER OF SEQUENCES: 104
;       CORRESPONDENCE ADDRESS:
;            ADDRESSEE: Merchant, Gould, Smith, Edell, Welter & Schmidt
;            STREET: 3100 No. 6656689west Center, 90 S. 7th Street
;            CITY: Minneapolis
;            STATE: MN
;            COUNTRY: U.S.A.
;            ZIP: 55402
;       COMPUTER READABLE FORM:
;            MEDIUM TYPE: Diskette
;            COMPUTER: IBM Compatible
;            OPERATING SYSTEM: DOS
;            SOFTWARE: FastSEQ Version 1.5
;       CURRENT APPLICATION DATA:
;            APPLICATION NUMBER: US/09/863,086
;            FILING DATE: 22-May-2001
;            CLASSIFICATION: <Unknown>
;       PRIOR APPLICATION DATA:
;            APPLICATION NUMBER: 09/312,520
;            FILING DATE: <Unknown>
;            APPLICATION NUMBER: 08/412,614
;            FILING DATE: 29-MAR-1995
;       ATTORNEY/AGENT INFORMATION:
;            NAME: Hillson, Randall A
;            REGISTRATION NUMBER: 31,838
;            REFERENCE/DOCKET NUMBER: 8076.75USC1
;       TELECOMMUNICATION INFORMATION:
;            TELEPHONE: 612/332-5300
;            TELEFAX: 612/332/9081
;            TELEX: <Unknown>
;    INFORMATION FOR SEQ ID NO: 104:
;       SEQUENCE CHARACTERISTICS:
;            LENGTH: 17 base pairs
;            TYPE: nucleic acid
;            STRANDEDNESS: both
;            TOPOLOGY: both
;       MOLECULE TYPE: Genomic DNA
;       HYPOTHETICAL: NO
;       ANTI-SENSE: NO
;       FRAGMENT TYPE: <Unknown>
;       ORIGINAL SOURCE:
;       SEQUENCE DESCRIPTION: SEQ ID NO: 104:
US-09-863-086-104

  Query Match             1.6%;  Score 14.4;  DB 1;  Length 17;
  Best Local Similarity   93.8%;  Pred. No. 26;
  Matches   15;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy         67 GGCGACGAAGGCCGTG 82
              ||||||||||| ||||
Db         16 GGCGACGAAGGACGTG 1


RESULT 31
US-08-373-124A-962
; Sequence 962, Application US/08373124A
; Patent No. 5646042
;  GENERAL INFORMATION:
;    APPLICANT:  Stinchcomb, Dan T.
;    APPLICANT:  Draper, Kenneth
;    APPLICANT:  McSwiggen, James
;    APPLICANT:  Jarvis, Thale
;    TITLE OF INVENTION:  METHODS AND COMPOSITIONS FOR
;    TITLE OF INVENTION:  TREATMENT OF RESTENOSIS AND
;    TITLE OF INVENTION:  CANCER USING RIBOZYMES
;    NUMBER OF SEQUENCES:  2627
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Lyon & Lyon
;      STREET:  633 West Fifth Street
;      STREET:  Suite 4700
;      CITY:  Los Angeles
;      STATE:  California
;      COUNTRY:  U.S.A.
;      ZIP:  90071
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  3.5" Diskette, 1.44 Mb
;      MEDIUM TYPE:  storage
;      COMPUTER:  IBM Compatible
;      OPERATING SYSTEM:  IBM P.C. DOS 5.0
;      SOFTWARE:  Word Perfect 5.1
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/373,124A
;      FILING DATE:  January 13, 1995
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  08/245,466
;      FILING DATE:  May 18, 1994
;      APPLICATION NUMBER:  08/192,943
;      FILING DATE:  February 7, 1994
;      APPLICATION NUMBER:  07/987,132
;      FILING DATE:  December 7, 1992
;      APPLICATION NUMBER:  07/936,422
;      FILING DATE:  August 26, 1992
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Warburg, Richard
;      REGISTRATION NUMBER:  32,327
;      REFERENCE/DOCKET NUMBER:  209/035
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  (213) 489-1600
;      TELEFAX:  (213) 955-0440
;      TELEX:  67-3510
;  INFORMATION FOR SEQ ID NO:  962:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  17 base pairs
;      TYPE:  nucleic acid
```

```
;       STRANDEDNESS:  single
;       TOPOLOGY:  linear
US-08-373-124A-962

  Query Match             1.6%;  Score 14;  DB 1;  Length 17;
  Best Local Similarity   57.1%;  Pred. No. 29;
  Matches    8;  Conservative    6;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        709 ATAGTTTTATAAAA 722
              |:||::::|:||||
Db          3 AUAGUUUUAUAAAA 16


RESULT 32
US-08-373-124A-964
; Sequence 964, Application US/08373124A
; Patent No. 5646042
;  GENERAL INFORMATION:
;    APPLICANT:  Stinchcomb, Dan T.
;    APPLICANT:  Draper, Kenneth
;    APPLICANT:  McSwiggen, James
;    APPLICANT:  Jarvis, Thale
;    TITLE OF INVENTION:  METHODS AND COMPOSITIONS FOR
;    TITLE OF INVENTION:  TREATMENT OF RESTENOSIS AND
;    TITLE OF INVENTION:  CANCER USING RIBOZYMES
;    NUMBER OF SEQUENCES:  2627
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Lyon & Lyon
;      STREET:  633 West Fifth Street
;      STREET:  Suite 4700
;      CITY:  Los Angeles
;      STATE:  California
;      COUNTRY:  U.S.A.
;      ZIP:  90071
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  3.5" Diskette, 1.44 Mb
;      MEDIUM TYPE:  storage
;      COMPUTER:  IBM Compatible
;      OPERATING SYSTEM:  IBM P.C. DOS 5.0
;      SOFTWARE:  Word Perfect 5.1
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/373,124A
;      FILING DATE:  January 13, 1995
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  08/245,466
;      FILING DATE:  May 18, 1994
;      APPLICATION NUMBER:  08/192,943
;      FILING DATE:  February 7, 1994
;      APPLICATION NUMBER:  07/987,132
;      FILING DATE:  December 7, 1992
;      APPLICATION NUMBER:  07/936,422
;      FILING DATE:  August 26, 1992
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Warburg, Richard
;      REGISTRATION NUMBER:  32,327
;      REFERENCE/DOCKET NUMBER:  209/035
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  (213) 489-1600
;      TELEFAX:  (213) 955-0440
;      TELEX:  67-3510
;  INFORMATION FOR SEQ ID NO:  964:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  17 base pairs
;      TYPE:  nucleic acid
;      STRANDEDNESS:  single
;      TOPOLOGY:  linear
US-08-373-124A-964

  Query Match             1.6%;  Score 14;  DB 1;  Length 17;
  Best Local Similarity   57.1%;  Pred. No. 29;
  Matches    8;  Conservative    6;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        709 ATAGTTTTATAAAA 722
              |:||::::|:||||
Db          2 AUAGUUUUAUAAAA 15


RESULT 33
US-08-373-124A-966
; Sequence 966, Application US/08373124A
; Patent No. 5646042
;  GENERAL INFORMATION:
;    APPLICANT:  Stinchcomb, Dan T.
;    APPLICANT:  Draper, Kenneth
;    APPLICANT:  McSwiggen, James
;    APPLICANT:  Jarvis, Thale
;    TITLE OF INVENTION:  METHODS AND COMPOSITIONS FOR
;    TITLE OF INVENTION:  TREATMENT OF RESTENOSIS AND
;    TITLE OF INVENTION:  CANCER USING RIBOZYMES
;    NUMBER OF SEQUENCES:  2627
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Lyon & Lyon
;      STREET:  633 West Fifth Street
;      STREET:  Suite 4700
;      CITY:  Los Angeles
;      STATE:  California
;      COUNTRY:  U.S.A.
;      ZIP:  90071
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  3.5" Diskette, 1.44 Mb
;      MEDIUM TYPE:  storage
;      COMPUTER:  IBM Compatible
;      OPERATING SYSTEM:  IBM P.C. DOS 5.0
;      SOFTWARE:  Word Perfect 5.1
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/373,124A
;      FILING DATE:  January 13, 1995
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  08/245,466
;      FILING DATE:  May 18, 1994
;      APPLICATION NUMBER:  08/192,943
;      FILING DATE:  February 7, 1994
;      APPLICATION NUMBER:  07/987,132
;      FILING DATE:  December 7, 1992
;      APPLICATION NUMBER:  07/936,422
;      FILING DATE:  August 26, 1992
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Warburg, Richard
;      REGISTRATION NUMBER:  32,327
;      REFERENCE/DOCKET NUMBER:  209/035
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  (213) 489-1600
;      TELEFAX:  (213) 955-0440
;      TELEX:  67-3510
;  INFORMATION FOR SEQ ID NO:  966:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  17 base pairs
;      TYPE:  nucleic acid
;      STRANDEDNESS:  single
;      TOPOLOGY:  linear
US-08-373-124A-966

  Query Match             1.6%;  Score 14;  DB 1;  Length 17;
  Best Local Similarity   57.1%;  Pred. No. 29;
  Matches    8;  Conservative    6;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        709 ATAGTTTTATAAAA 722
              |:||::::|:||||
Db          1 AUAGUUUUAUAAAA 14


RESULT 34
US-08-435-628-962
; Sequence 962, Application US/08435628
; Patent No. 5817796
;  GENERAL INFORMATION:
```

```
;    APPLICANT:  Stinchcomb, Dan T.
;    APPLICANT:  Draper, Kenneth
;    APPLICANT:  McSwiggen, James
;    APPLICANT:  Jarvis, Thale
;    TITLE OF INVENTION:  METHODS AND COMPOSITIONS FOR
;    TITLE OF INVENTION:  TREATMENT OF RESTENOSIS AND
;    TITLE OF INVENTION:  CANCER USING RIBOZYMES
;    NUMBER OF SEQUENCES:  2627
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Lyon & Lyon
;      STREET:  633 West Fifth Street
;      STREET:  Suite 4700
;      CITY:  Los Angeles
;      STATE:  California
;      COUNTRY:  U.S.A.
;      ZIP:  90071
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  3.5" Diskette, 1.44 Mb
;      MEDIUM TYPE:  storage
;      COMPUTER:  IBM Compatible
;      OPERATING SYSTEM:  IBM P.C. DOS 5.0
;      SOFTWARE:  Word Perfect 5.1
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/435,628
;      FILING DATE:  05-MAY-1995
;      CLASSIFICATION:  514
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  08/373,124
;      FILING DATE:  January 13, 1995
;      APPLICATION NUMBER:  08/245,466
;      FILING DATE:  May 18, 1994
;      APPLICATION NUMBER:  08/192,943
;      FILING DATE:  February 7, 1994
;      APPLICATION NUMBER:  07/987,132
;      FILING DATE:  December 7, 1992
;      APPLICATION NUMBER:  07/936,422
;      FILING DATE:  August 26, 1992
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Warburg, Richard
;      REGISTRATION NUMBER:  32,327
;      REFERENCE/DOCKET NUMBER:  209/035
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  (213) 489-1600
;      TELEFAX:  (213) 955-0440
;      TELEX:  67-3510
;  INFORMATION FOR SEQ ID NO:  962:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  17 base pairs
;      TYPE:  nucleic acid
;      STRANDEDNESS:  single
;      TOPOLOGY:  linear
US-08-435-628-962

  Query Match             1.6%;  Score 14;  DB 1;  Length 17;
  Best Local Similarity   57.1%;  Pred. No. 29;
  Matches    8;  Conservative    6;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        709 ATAGTTTTATAAAA 722
              |:||::::|:||||
Db          3 AUAGUUUUAUAAAA 16


RESULT 35
US-08-435-628-964
; Sequence 964, Application US/08435628
; Patent No. 5817796
;  GENERAL INFORMATION:
;    APPLICANT:  Stinchcomb, Dan T.
;    APPLICANT:  Draper, Kenneth
;    APPLICANT:  McSwiggen, James
;    APPLICANT:  Jarvis, Thale
;    TITLE OF INVENTION:  METHODS AND COMPOSITIONS FOR
;    TITLE OF INVENTION:  TREATMENT OF RESTENOSIS AND
;    TITLE OF INVENTION:  CANCER USING RIBOZYMES
;    NUMBER OF SEQUENCES:  2627
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Lyon & Lyon
;      STREET:  633 West Fifth Street
;      STREET:  Suite 4700
;      CITY:  Los Angeles
;      STATE:  California
;      COUNTRY:  U.S.A.
;      ZIP:  90071
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  3.5" Diskette, 1.44 Mb
;      MEDIUM TYPE:  storage
;      COMPUTER:  IBM Compatible
;      OPERATING SYSTEM:  IBM P.C. DOS 5.0
;      SOFTWARE:  Word Perfect 5.1
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/435,628
;      FILING DATE:  05-MAY-1995
;      CLASSIFICATION:  514
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  08/373,124
;      FILING DATE:  January 13, 1995
;      APPLICATION NUMBER:  08/245,466
;      FILING DATE:  May 18, 1994
;      APPLICATION NUMBER:  08/192,943
;      FILING DATE:  February 7, 1994
;      APPLICATION NUMBER:  07/987,132
;      FILING DATE:  December 7, 1992
;      APPLICATION NUMBER:  07/936,422
;      FILING DATE:  August 26, 1992
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Warburg, Richard
;      REGISTRATION NUMBER:  32,327
;      REFERENCE/DOCKET NUMBER:  209/035
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  (213) 489-1600
;      TELEFAX:  (213) 955-0440
;      TELEX:  67-3510
;  INFORMATION FOR SEQ ID NO:  964:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  17 base pairs
;      TYPE:  nucleic acid
;      STRANDEDNESS:  single
;      TOPOLOGY:  linear
US-08-435-628-964

  Query Match             1.6%;  Score 14;  DB 1;  Length 17;
  Best Local Similarity   57.1%;  Pred. No. 29;
  Matches    8;  Conservative    6;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        709 ATAGTTTTATAAAA 722
              |:||::::|:||||
Db          2 AUAGUUUUAUAAAA 15


RESULT 36
US-08-435-628-966
; Sequence 966, Application US/08435628
; Patent No. 5817796
;  GENERAL INFORMATION:
;    APPLICANT:  Stinchcomb, Dan T.
;    APPLICANT:  Draper, Kenneth
;    APPLICANT:  McSwiggen, James
;    APPLICANT:  Jarvis, Thale
;    TITLE OF INVENTION:  METHODS AND COMPOSITIONS FOR
;    TITLE OF INVENTION:  TREATMENT OF RESTENOSIS AND
;    TITLE OF INVENTION:  CANCER USING RIBOZYMES
;    NUMBER OF SEQUENCES:  2627
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Lyon & Lyon
;      STREET:  633 West Fifth Street
;      STREET:  Suite 4700
```

```
;       CITY:  Los Angeles
;       STATE:  California
;       COUNTRY:  U.S.A.
;       ZIP:  90071
;     COMPUTER READABLE FORM:
;       MEDIUM TYPE:  3.5" Diskette, 1.44 Mb
;       MEDIUM TYPE:  storage
;       COMPUTER:  IBM Compatible
;       OPERATING SYSTEM:  IBM P.C. DOS 5.0
;       SOFTWARE:  Word Perfect 5.1
;     CURRENT APPLICATION DATA:
;       APPLICATION NUMBER:  US/08/435,628
;       FILING DATE:  05-MAY-1995
;       CLASSIFICATION:  514
;     PRIOR APPLICATION DATA:
;       APPLICATION NUMBER:  08/373,124
;       FILING DATE:  January 13, 1995
;       APPLICATION NUMBER:  08/245,466
;       FILING DATE:  May 18, 1994
;       APPLICATION NUMBER:  08/192,943
;       FILING DATE:  February 7, 1994
;       APPLICATION NUMBER:  07/987,132
;       FILING DATE:  December 7, 1992
;       APPLICATION NUMBER:  07/936,422
;       FILING DATE:  August 26, 1992
;     ATTORNEY/AGENT INFORMATION:
;       NAME:  Warburg, Richard
;       REGISTRATION NUMBER:  32,327
;       REFERENCE/DOCKET NUMBER:  209/035
;     TELECOMMUNICATION INFORMATION:
;       TELEPHONE:  (213) 489-1600
;       TELEFAX:  (213) 955-0440
;       TELEX:  67-3510
;   INFORMATION FOR SEQ ID NO:  966:
;     SEQUENCE CHARACTERISTICS:
;       LENGTH:  17 base pairs
;       TYPE:  nucleic acid
;       STRANDEDNESS:  single
;       TOPOLOGY:  linear
US-08-435-628-966

  Query Match             1.6%;  Score 14;  DB 1;  Length 17;
  Best Local Similarity   57.1%;  Pred. No. 29;
  Matches    8;  Conservative    6;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        709 ATAGTTTTATAAAA 722
              |:||::::|:||||
Db          1 AUAGUUUUAUAAAA 14


RESULT 37
US-08-584-040-5950/c
; Sequence 5950, Application US/08584040
; Patent No. 6346398
;  GENERAL INFORMATION:
;     APPLICANT:  Pavco, Pamela
;     APPLICANT:  McSwiggen, James
;     APPLICANT:  Stinchcomb, Dan T.
;     APPLICANT:  Escobedo, Jaime
;     TITLE OF INVENTION:  METHOD AND REAGENT FOR THE
;     TITLE OF INVENTION:  TREATMENT OF DISEASES OR
;     TITLE OF INVENTION:  CONDITIONS RELATED TO LEVELS
;     TITLE OF INVENTION:  OF VASCULAR ENDOTHELIAL
;     TITLE OF INVENTION:  GROWTH FACTOR
;     NUMBER OF SEQUENCES:  8502
;     CORRESPONDENCE ADDRESS:
;       ADDRESSEE:  Lyon & Lyon
;       STREET:  633 West Fifth Street
;       STREET:  Suite 4700
;       CITY:  Los Angeles
;       STATE:  California
;       COUNTRY:  U.S.A.
;       ZIP:  90071-2066
;     COMPUTER READABLE FORM:
;       MEDIUM TYPE:  3.5" Diskette, 1.44 Mb
;       MEDIUM TYPE:  storage
;       COMPUTER:  IBM Compatible
;       OPERATING SYSTEM:  IBM P.C. DOS 5.0
;       SOFTWARE:  Word Perfect 5.1
;     CURRENT APPLICATION DATA:
;       APPLICATION NUMBER:  US/08/584,040
;       FILING DATE:  January 11, 1996
;       CLASSIFICATION:  514
;     PRIOR APPLICATION DATA:
;       APPLICATION NUMBER:  60/005,974
;       FILING DATE:  October 26, 1995
;     ATTORNEY/AGENT INFORMATION:
;       NAME:  Warburg, Richard J.
;       REGISTRATION NUMBER:  32,327
;       REFERENCE/DOCKET NUMBER:  218/064
;     TELECOMMUNICATION INFORMATION:
;       TELEPHONE:  (213) 489-1600
;       TELEFAX:  (213) 955-0440
;       TELEX:  67-3510
;   INFORMATION FOR SEQ ID NO:  5950:
;     SEQUENCE CHARACTERISTICS:
;       LENGTH:  17 base pairs
;       TYPE:  nucleic acid
;       STRANDEDNESS:  single
;       TOPOLOGY:  linear
US-08-584-040-5950

  Query Match             1.6%;  Score 13.8;  DB 1;  Length 17;
  Best Local Similarity   88.2%;  Pred. No. 30;
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        543 TGTAGTCTGAGGCCCCT 559
              || |||||||| ||||
Db         17 TGCAGTCTGAGGTCCCT 1


RESULT 38
US-09-371-772B-2787/c
; Sequence 2787, Application US/09371772B
; Patent No. 6566127
; GENERAL INFORMATION:
;  APPLICANT: Ribozyme Pharmaceuticals, Inc.
;  APPLICANT:  Pavco, Pam
;  APPLICANT:  McSwiggen, Jim
;  APPLICANT:  Stinchcomb, Dan
;  APPLICANT:  Escobedo, Jaime
;  TITLE OF INVENTION: Method and Reagent for the Treatment of Diseases or Conditions Rel
;  TITLE OF INVENTION:  Levels of Vascular Endothelial Growth Factor Receptor
;  FILE REFERENCE: MBHB00,876-J (237/198)
;  CURRENT APPLICATION NUMBER: US/09/371,772B
;  CURRENT FILING DATE:  1999-08-10
;  PRIOR APPLICATION NUMBER: US 60/005,974
;  PRIOR FILING DATE: 1995-10-26
;  PRIOR APPLICATION NUMBER: US 08/584,040
;  PRIOR FILING DATE: 1996-01-08
;  NUMBER OF SEQ ID NOS: 14225
;  SOFTWARE: PatentIn version 3.0
; SEQ ID NO 2787
;   LENGTH: 17
;   TYPE: RNA
;   ORGANISM: Mus sp.
US-09-371-772B-2787

  Query Match             1.6%;  Score 13.8;  DB 1;  Length 17;
  Best Local Similarity   88.2%;  Pred. No. 30;
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        543 TGTAGTCTGAGGCCCCT 559
              || |||||||| ||||
Db         17 TGCAGTCTGAGGTCCCT 1
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```
RESULT 39
US-09-371-772B-5100/c
; Sequence 5100, Application US/09371772B
; Patent No. 6566127
; GENERAL INFORMATION:
;  APPLICANT: Ribozyme Pharmaceuticals, Inc.
;  APPLICANT:  Pavco, Pam
;  APPLICANT:  McSwiggen, Jim
;  APPLICANT:  Stinchcomb, Dan
;  APPLICANT:  Escobedo, Jaime
;  TITLE OF INVENTION: Method and Reagent for the Treatment of Diseases or Conditions Re
;  TITLE OF INVENTION:  Levels of Vascular Endothelial Growth Factor Receptor
;  FILE REFERENCE: MBHB00,876-J (237/198)
;  CURRENT APPLICATION NUMBER: US/09/371,772B
;  CURRENT FILING DATE:  1999-08-10
;  PRIOR APPLICATION NUMBER: US 60/005,974
;  PRIOR FILING DATE: 1995-10-26
;  PRIOR APPLICATION NUMBER: US 08/584,040
;  PRIOR FILING DATE: 1996-01-08
;  NUMBER OF SEQ ID NOS: 14225
;  SOFTWARE: PatentIn version 3.0
; SEQ ID NO 5100
;   LENGTH: 17
;   TYPE: RNA
;   ORGANISM: Homo sapiens
US-09-371-772B-5100

  Query Match             1.6%;  Score 13.8;  DB 1;  Length 17;
  Best Local Similarity   88.2%;  Pred. No. 30;
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        239 ACCAGTGCAGGTCCTCA 255
              | ||||||||| ||||||
Db         17 ATCAGTGCAGCTCCTCA 1


RESULT 40
US-09-371-772B-6796
; Sequence 6796, Application US/09371772B
; Patent No. 6566127
; GENERAL INFORMATION:
;  APPLICANT: Ribozyme Pharmaceuticals, Inc.
;  APPLICANT:  Pavco, Pam
;  APPLICANT:  McSwiggen, Jim
;  APPLICANT:  Stinchcomb, Dan
;  APPLICANT:  Escobedo, Jaime
;  TITLE OF INVENTION: Method and Reagent for the Treatment of Diseases or Conditions Re
;  TITLE OF INVENTION:  Levels of Vascular Endothelial Growth Factor Receptor
;  FILE REFERENCE: MBHB00,876-J (237/198)
;  CURRENT APPLICATION NUMBER: US/09/371,772B
;  CURRENT FILING DATE:  1999-08-10
;  PRIOR APPLICATION NUMBER: US 60/005,974
;  PRIOR FILING DATE: 1995-10-26
;  PRIOR APPLICATION NUMBER: US 08/584,040
;  PRIOR FILING DATE: 1996-01-08
;  NUMBER OF SEQ ID NOS: 14225
;  SOFTWARE: PatentIn version 3.0
; SEQ ID NO 6796
;   LENGTH: 17
;   TYPE: RNA
;   ORGANISM: Homo sapiens
US-09-371-772B-6796

  Query Match             1.6%;  Score 13.8;  DB 1;  Length 17;
  Best Local Similarity   47.1%;  Pred. No. 30;
  Matches    8;  Conservative    7;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        642 ACTTTTTCAGAGTTGCT 658
              || :::::|||||::| :
Db          1 ACGUUUUCAGAGUUGGU 17


RESULT 41
US-09-866-108A-8960
; Sequence 8960, Application US/09866108A
; Patent No. 6686188
; GENERAL INFORMATION:
;  APPLICANT: GU, Yizhong
;  APPLICANT:  JI, Yonggang
;  APPLICANT:  PENN, Sharron G.
;  APPLICANT:  HANZEL, David K.
;  APPLICANT:  RANK, David R.
;  APPLICANT:  CHEN, Wensheng
;  APPLICANT:  SHANNON, Mark
;  TITLE OF INVENTION: MYOSIN-LIKE GENE EXPRESSED IN HUMAN HEART AND MUSCLE
;  FILE REFERENCE: AEOMICA-7
;  CURRENT APPLICATION NUMBER: US/09/866,108A
;  CURRENT FILING DATE:  2001-05-25
;  PRIOR APPLICATION NUMBER: US 60/207,456
;  PRIOR FILING DATE: 2000-05-26
;  PRIOR APPLICATION NUMBER: GB 24263.6
;  PRIOR FILING DATE: 2000-10-04
;  PRIOR APPLICATION NUMBER: US 60/236,359
;  PRIOR FILING DATE: 2000-09-27
;  PRIOR APPLICATION NUMBER: PCT/US01/00666
;  PRIOR FILING DATE: 2001-01-30
;  PRIOR APPLICATION NUMBER: PCT/US01/00667
;  PRIOR FILING DATE: 2001-01-30
;  PRIOR APPLICATION NUMBER: PCT/US01/00664
;  PRIOR FILING DATE: 2001-01-30
;  PRIOR APPLICATION NUMBER: PCT/US01/00669
;  PRIOR FILING DATE: 2001-01-30
;  PRIOR APPLICATION NUMBER: PCT/US01/00665
;  PRIOR FILING DATE: 2001-01-30
;  PRIOR APPLICATION NUMBER: PCT/US01/00668
;  PRIOR FILING DATE: 2001-01-30
;  PRIOR APPLICATION NUMBER: PCT/US01/00663
;  PRIOR FILING DATE: 2001-01-30
;  Remaining Prior Application data removed - See File Wrapper or PALM.
;  NUMBER OF SEQ ID NOS: 15755
;  SOFTWARE: Aeomica Sequence Listing Engine
; Patent No. 6686188
; SEQ ID NO 8960
;   LENGTH: 17
;   TYPE: DNA
;   ORGANISM: Homo sapiens
US-09-866-108A-8960

  Query Match             1.6%;  Score 13.8;  DB 1;  Length 17;
  Best Local Similarity   88.2%;  Pred. No. 30;
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        183 CTGAAGGCCTGCATGGA 199
              |||||||||  ||||||
Db          1 CTGAAGGCCGACATGGA 17


RESULT 42
US-09-685-664B-2787/c
; Sequence 2787, Application US/09685664B
; Patent No. 6818447
; GENERAL INFORMATION:
;  APPLICANT: Ribozyme Pharmaceuticals, Inc.
;  APPLICANT:  Pavco, Pam
;  APPLICANT:  McSwiggen, Jim
;  APPLICANT:  Stinchcomb, Dan
;  APPLICANT:  Escobedo, Jaime
;  TITLE OF INVENTION: Method and Reagent for Treatment of Diseases or Conditions Relatec
;  TITLE OF INVENTION:  Levels of Vascular Endothelial Growth Factor Recptor
;  FILE REFERENCE: MBHB00-876-K (400/021)
;  CURRENT APPLICATION NUMBER: US/09/685,664B
;  CURRENT FILING DATE:  2000-10-10
;  PRIOR APPLICATION NUMBER: US 60/005,974
;  PRIOR FILING DATE: 1995-10-26
;  PRIOR APPLICATION NUMBER: US 08/584,040
```

```
;  PRIOR FILING DATE: 1996-01-08
;  PRIOR APPLICATION NUMBER: US 09/371,772
;  PRIOR FILING DATE: 1999-08-10
;  NUMBER OF SEQ ID NOS: 8231
;  SOFTWARE: PatentIn version 3.0
; SEQ ID NO 2787
;   LENGTH: 17
;   TYPE: RNA
;   ORGANISM: Mus musculus
US-09-685-664B-2787

  Query Match             1.6%;  Score 13.8;  DB 1;  Length 17;
  Best Local Similarity   88.2%;  Pred. No. 30;
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        543 TGTAGTCTGAGGCCCCT 559
              || |||||||||  ||||
Db         17 TGCAGTCTGAGGTCCCT 1


RESULT 43
US-09-371-772B-5942/c
; Sequence 5942, Application US/09371772B
; Patent No. 6566127
; GENERAL INFORMATION:
;  APPLICANT: Ribozyme Pharmaceuticals, Inc.
;  APPLICANT:  Pavco, Pam
;  APPLICANT:  McSwiggen, Jim
;  APPLICANT:  Stinchcomb, Dan
;  APPLICANT:  Escobedo, Jaime
;  TITLE OF INVENTION: Method and Reagent for the Treatment of Diseases or Conditions Re
;  TITLE OF INVENTION:  Levels of Vascular Endothelial Growth Factor Receptor
;  FILE REFERENCE: MBHB00,876-J (237/198)
;  CURRENT APPLICATION NUMBER: US/09/371,772B
;  CURRENT FILING DATE:  1999-08-10
;  PRIOR APPLICATION NUMBER: US 60/005,974
;  PRIOR FILING DATE: 1995-10-26
;  PRIOR APPLICATION NUMBER: US 08/584,040
;  PRIOR FILING DATE: 1996-01-08
;  NUMBER OF SEQ ID NOS: 14225
;  SOFTWARE: PatentIn version 3.0
; SEQ ID NO 5942
;   LENGTH: 16
;   TYPE: RNA
;   ORGANISM: Homo sapiens
US-09-371-772B-5942

  Query Match             1.5%;  Score 13.4;  DB 1;  Length 16;
  Best Local Similarity   93.3%;  Pred. No. 30;
  Matches   14;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        241 CAGTGCAGGTCCTCA 255
              ||||||| ||||||
Db         16 CAGTGCAGCTCCTCA 2


RESULT 44
US-09-371-772B-7004
; Sequence 7004, Application US/09371772B
; Patent No. 6566127
; GENERAL INFORMATION:
;  APPLICANT: Ribozyme Pharmaceuticals, Inc.
;  APPLICANT:  Pavco, Pam
;  APPLICANT:  McSwiggen, Jim
;  APPLICANT:  Stinchcomb, Dan
;  APPLICANT:  Escobedo, Jaime
;  TITLE OF INVENTION: Method and Reagent for the Treatment of Diseases or Conditions Re
;  TITLE OF INVENTION:  Levels of Vascular Endothelial Growth Factor Receptor
;  FILE REFERENCE: MBHB00,876-J (237/198)
;  CURRENT APPLICATION NUMBER: US/09/371,772B
;  CURRENT FILING DATE:  1999-08-10
;  PRIOR APPLICATION NUMBER: US 60/005,974
;  PRIOR FILING DATE: 1995-10-26
;  PRIOR APPLICATION NUMBER: US 08/584,040
;  PRIOR FILING DATE: 1996-01-08
;  NUMBER OF SEQ ID NOS: 14225
;  SOFTWARE: PatentIn version 3.0
; SEQ ID NO 7004
;   LENGTH: 16
;   TYPE: RNA
;   ORGANISM: Homo sapiens
US-09-371-772B-7004

  Query Match             1.5%;  Score 13;  DB 1;  Length 16;
  Best Local Similarity   84.6%;  Pred. No. 33;
  Matches   11;  Conservative    2;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        421 GGTCCATGAAAAA 433
              ||:|||:||||||
Db          4 GGUCCAUGAAAAA 16


RESULT 45
US-09-371-772B-5969/c
; Sequence 5969, Application US/09371772B
; Patent No. 6566127
; GENERAL INFORMATION:
;  APPLICANT: Ribozyme Pharmaceuticals, Inc.
;  APPLICANT:  Pavco, Pam
;  APPLICANT:  McSwiggen, Jim
;  APPLICANT:  Stinchcomb, Dan
;  APPLICANT:  Escobedo, Jaime
;  TITLE OF INVENTION: Method and Reagent for the Treatment of Diseases or Conditions Rel
;  TITLE OF INVENTION:  Levels of Vascular Endothelial Growth Factor Receptor
;  FILE REFERENCE: MBHB00,876-J (237/198)
;  CURRENT APPLICATION NUMBER: US/09/371,772B
;  CURRENT FILING DATE:  1999-08-10
;  PRIOR APPLICATION NUMBER: US 60/005,974
;  PRIOR FILING DATE: 1995-10-26
;  PRIOR APPLICATION NUMBER: US 08/584,040
;  PRIOR FILING DATE: 1996-01-08
;  NUMBER OF SEQ ID NOS: 14225
;  SOFTWARE: PatentIn version 3.0
; SEQ ID NO 5969
;   LENGTH: 16
;   TYPE: RNA
;   ORGANISM: Homo sapiens
US-09-371-772B-5969

  Query Match             1.5%;  Score 12.8;  DB 1;  Length 16;
  Best Local Similarity   87.5%;  Pred. No. 34;
  Matches   14;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        638 TGTGACTTTTTCAGAG 653
              |||||| ||||||| |
Db         16 TGTGACATTTTCAGTG 1


RESULT 46
US-09-371-772B-6103
; Sequence 6103, Application US/09371772B
; Patent No. 6566127
; GENERAL INFORMATION:
;  APPLICANT: Ribozyme Pharmaceuticals, Inc.
;  APPLICANT:  Pavco, Pam
;  APPLICANT:  McSwiggen, Jim
;  APPLICANT:  Stinchcomb, Dan
;  APPLICANT:  Escobedo, Jaime
;  TITLE OF INVENTION: Method and Reagent for the Treatment of Diseases or Conditions Re
;  TITLE OF INVENTION:  Levels of Vascular Endothelial Growth Factor Receptor
;  FILE REFERENCE: MBHB00,876-J (237/198)
;  CURRENT APPLICATION NUMBER: US/09/371,772B
;  CURRENT FILING DATE:  1999-08-10
;  PRIOR APPLICATION NUMBER: US 60/005,974
;  PRIOR FILING DATE: 1995-10-26
;  PRIOR APPLICATION NUMBER: US 08/584,040
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;  PRIOR FILING DATE: 1996-01-08
;  NUMBER OF SEQ ID NOS: 14225
;  SOFTWARE: PatentIn version 3.0
; SEQ ID NO 6103
;   LENGTH: 16
;   TYPE: RNA
;   ORGANISM: Homo sapiens
US-09-371-772B-6103

  Query Match              1.5%;  Score 12.8;  DB 1;  Length 16;
  Best Local Similarity   75.0%;  Pred. No. 34;
  Matches   12;  Conservative    2;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        424 CCATGAAAAAGCAGAT 439
              |||:||||| ||| |:
Db          1 CCAUGAAAAUGCAAAU 16


RESULT 47
US-08-311-760A-197/c
; Sequence 197, Application US/08311760A
; Patent No. 5599706
;  GENERAL INFORMATION:
;    APPLICANT:  Stinchcomb, Dan T.
;    APPLICANT:  McSwiggen, James
;    APPLICANT:  Newton, Roger S.
;    APPLICANT:  Ramharack, Randy
;    TITLE OF INVENTION:  RIBOZYME TREATMENT OF DISEASES
;    TITLE OF INVENTION:  OR CONDITIONS RELATED TO LEVELS OF
;    TITLE OF INVENTION:  PLASMA LIPOPROTEIN (a) [LP(a)] BY
;    TITLE OF INVENTION:  INHIBITING APOLIPOPROTEIN
;    TITLE OF INVENTION:
;    NUMBER OF SEQUENCES:  392
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Lyon & Lyon
;      STREET:  633 West Fifth Street
;      STREET:  Suite 4700
;      CITY:  Los Angeles
;      STATE:  California
;      COUNTRY:  U.S.A.
;      ZIP:  90071
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  3.5" Diskette, 1.44 Mb
;      MEDIUM TYPE:  storage
;      COMPUTER:  IBM Compatible
;      OPERATING SYSTEM:  IBM P.C. DOS 5.0
;      SOFTWARE:  FastSEQ Version 1.5
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/311,760A
;      FILING DATE:  September 23, 1994
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:
;      FILING DATE:
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Warburg, Richard
;      REGISTRATION NUMBER:  32,327
;      REFERENCE/DOCKET NUMBER:  208/155
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  (213) 489-1600
;      TELEFAX:  (213) 955-0440
;      TELEX:  67-3510
;  INFORMATION FOR SEQ ID NO:  197:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  15 base pairs
;      TYPE:  nucleic acid
;      STRANDEDNESS:  single
;      TOPOLOGY:  linear
US-08-311-760A-197

  Query Match              1.4%;  Score 12.4;  DB 1;  Length 15;
  Best Local Similarity   92.9%;  Pred. No. 34;
  Matches   13;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        703 ATTTGTATAGTTTT 716
              ||||| ||||||||
Db         15 ATTTGGATAGTTTT 2


RESULT 48
US-08-363-240A-144/c
; Sequence 144, Application US/08363240A
; Patent No. 5705388
;  GENERAL INFORMATION:
;    APPLICANT:  Couture, Larry
;    APPLICANT:  McSwiggen, James
;    APPLICANT:  Bisgaier, Charles
;    APPLICANT:  Pape, Michael
;    TITLE OF INVENTION:  METHOD AND REAGENT FOR
;    TITLE OF INVENTION:  PREVENTION, INHIBITION OF
;    TITLE OF INVENTION:  PROGRESSION AND REGRESSION
;    TITLE OF INVENTION:  OF VASCULAR DISEASES
;    NUMBER OF SEQUENCES:  1243
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Lyon & Lyon
;      STREET:  633 West Fifth Street
;      STREET:  Suite 4700
;      CITY:  Los Angeles
;      STATE:  California
;      COUNTRY:  U.S.A.
;      ZIP:  90071
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  3.5" Diskette, 1.44 Mb
;      MEDIUM TYPE:  storage
;      COMPUTER:  IBM Compatible
;      OPERATING SYSTEM:  IBM P.C. DOS 5.0
;      SOFTWARE:  Word Perfect 5.1
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/363,240A
;      FILING DATE:  December 23, 1994
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:
;      FILING DATE:
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Warburg, Richard
;      REGISTRATION NUMBER:  32,327
;      REFERENCE/DOCKET NUMBER:  210/096
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  (213) 489-1600
;      TELEFAX:  (213) 955-0440
;      TELEX:  67-3510
;  INFORMATION FOR SEQ ID NO:  144:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  15 base pairs
;      TYPE:  nucleic acid
;      STRANDEDNESS:  single
;      TOPOLOGY:  linear
US-08-363-240A-144

  Query Match              1.4%;  Score 12.4;  DB 1;  Length 15;
  Best Local Similarity   92.9%;  Pred. No. 34;
  Matches   13;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        693 CACTTGGAAGATTT 706
              | ||||||||||||
Db         15 CTCTTGGAAGATTT 2


RESULT 49
US-08-363-240A-145/c
; Sequence 145, Application US/08363240A
; Patent No. 5705388
;  GENERAL INFORMATION:
;    APPLICANT:  Couture, Larry
;    APPLICANT:  McSwiggen, James
;    APPLICANT:  Bisgaier, Charles
;    APPLICANT:  Pape, Michael
```

```
;    TITLE OF INVENTION:  METHOD AND REAGENT FOR
;    TITLE OF INVENTION:  PREVENTION, INHIBITION OF
;    TITLE OF INVENTION:  PROGRESSION AND REGRESSION
;    TITLE OF INVENTION:  OF VASCULAR DISEASES
;    NUMBER OF SEQUENCES:  1243
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Lyon & Lyon
;      STREET:  633 West Fifth Street
;      STREET:  Suite 4700
;      CITY:  Los Angeles
;      STATE:  California
;      COUNTRY:  U.S.A.
;      ZIP:  90071
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  3.5" Diskette, 1.44 Mb
;      MEDIUM TYPE:  storage
;      COMPUTER:  IBM Compatible
;      OPERATING SYSTEM:  IBM P.C. DOS 5.0
;      SOFTWARE:  Word Perfect 5.1
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/363,240A
;      FILING DATE:  December 23, 1994
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:
;      FILING DATE:
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Warburg, Richard
;      REGISTRATION NUMBER:  32,327
;      REFERENCE/DOCKET NUMBER:  210/096
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  (213) 489-1600
;      TELEFAX:  (213) 955-0440
;      TELEX:  67-3510
;  INFORMATION FOR SEQ ID NO:  145:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  15 base pairs
;      TYPE:  nucleic acid
;      STRANDEDNESS:  single
;      TOPOLOGY:  linear
US-08-363-240A-145

  Query Match             1.4%;  Score 12.4;  DB 1;  Length 15;
  Best Local Similarity   92.9%;  Pred. No. 34;
  Matches   13;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        693 CACTTGGAAGATTT 706
              | ||||||||||||
Db         14 CTCTTGGAAGATTT 1


RESULT 50
US-08-774-310-197/c
; Sequence 197, Application US/08774310
; Patent No. 5877022
;  GENERAL INFORMATION:
;    APPLICANT:  Stinchcomb, Daniel T.
;    APPLICANT:  McSwiggen, James
;    APPLICANT:  Newton, Roger S.
;    APPLICANT:  Ramharack, Randy
;    TITLE OF INVENTION:  RIBOZYME TREATMENT OF DISEASES
;    TITLE OF INVENTION:  OR CONDITIONS RELATED TO LEVELS OF
;    TITLE OF INVENTION:  PLASMA LIPOPROTEIN (a) [LP(a)] BY
;    TITLE OF INVENTION:  INHIBITING APOLIPOPROTEIN
;    TITLE OF INVENTION:
;    NUMBER OF SEQUENCES:  392
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Lyon & Lyon
;      STREET:  633 West Fifth Street
;      STREET:  Suite 4700
;      CITY:  Los Angeles
;      STATE:  California
;      COUNTRY:  U.S.A.
;      ZIP:  90071
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  3.5" Diskette, 1.44 Mb
;      MEDIUM TYPE:  storage
;      COMPUTER:  IBM Compatible
;      OPERATING SYSTEM:  IBM P.C. DOS 5.0
;      SOFTWARE:  FastSEQ Version 1.5
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/774,310
;      FILING DATE:  December 23, 1996
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  08/311,760
;      FILING DATE:  September 23, 1994
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Warburg, Richard
;      REGISTRATION NUMBER:  32,327
;      REFERENCE/DOCKET NUMBER:  223/229
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  (213) 489-1600
;      TELEFAX:  (213) 955-0440
;      TELEX:  67-3510
;  INFORMATION FOR SEQ ID NO:  197:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  15 base pairs
;      TYPE:  nucleic acid
;      STRANDEDNESS:  single
;      TOPOLOGY:  linear
US-08-774-310-197

  Query Match             1.4%;  Score 12.4;  DB 1;  Length 15;
  Best Local Similarity   92.9%;  Pred. No. 34;
  Matches   13;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        703 ATTTGTATAGTTTT 716
              ||||| ||||||||
Db         15 ATTTGGATAGTTTT 2


RESULT 51
US-08-319-492B-148
; Sequence 148, Application US/08319492B
; Patent No. 5616488
;  GENERAL INFORMATION:
;    APPLICANT:  Sullivan, Sean M.
;    APPLICANT:  Draper, Kenneth G.
;    APPLICANT:  McSwiggen, James
;    APPLICANT:  Stinchcomb, Dan T.
;    TITLE OF INVENTION:  RIBOZYME TREATMENT OF DISEASES
;    TITLE OF INVENTION:  OR CONDITIONS RELATED TO LEVELS
;    TITLE OF INVENTION:  OF IL-5
;    NUMBER OF SEQUENCES:  751
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Lyon & Lyon
;      STREET:  633 West Fifth Street
;      STREET:  Suite 4700
;      CITY:  Los Angeles
;      STATE:  California
;      COUNTRY:  U.S.A.
;      ZIP:  90071
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  3.5" Diskette, 1.44 Mb
;      MEDIUM TYPE:  storage
;      COMPUTER:  IBM Compatible
;      OPERATING SYSTEM:  IBM P.C. DOS 5.0
;      SOFTWARE:  Word Perfect 5.1
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/319,492B
;      FILING DATE:  October 7, 1994
;    PRIOR APPLICATION DATA:
;    PRIOR APPLICATION DATA:  including application
;    PRIOR APPLICATION DATA:  described below:                Two
;      APPLICATION NUMBER:  08/008,895
;      FILING DATE:  January 19, 1993
;      APPLICATION NUMBER:  07/989,849
```

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;      FILING DATE:  December 7, 1992
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Warburg, Richard
;      REGISTRATION NUMBER:  32,327
;      REFERENCE/DOCKET NUMBER:  209/276
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  (213) 489-1600
;      TELEFAX:  (213) 955-0440
;      TELEX:  67-3510
;  INFORMATION FOR SEQ ID NO:  148:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  15 base pairs
;      TYPE:  nucleic acid
;      STRANDEDNESS:  single
;      TOPOLOGY:  linear
US-08-319-492B-148

  Query Match             1.4%;  Score 12;  DB 1;  Length 15;
  Best Local Similarity   58.3%;  Pred. No. 37;
  Matches    7;  Conservative    5;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        730 AAAATGTCTGTT 741
              ||||:|:|:|::
Db          1 AAAAUGUCUGUU 12


RESULT 52
US-08-363-240A-143/c
; Sequence 143, Application US/08363240A
; Patent No. 5705388
;  GENERAL INFORMATION:
;    APPLICANT:  Couture, Larry
;    APPLICANT:  McSwiggen, James
;    APPLICANT:  Bisgaier, Charles
;    APPLICANT:  Pape, Michael
;    TITLE OF INVENTION:  METHOD AND REAGENT FOR
;    TITLE OF INVENTION:  PREVENTION, INHIBITION OF
;    TITLE OF INVENTION:  PROGRESSION AND REGRESSION
;    TITLE OF INVENTION:  OF VASCULAR DISEASES
;    NUMBER OF SEQUENCES:  1243
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Lyon & Lyon
;      STREET:  633 West Fifth Street
;      STREET:  Suite 4700
;      CITY:  Los Angeles
;      STATE:  California
;      COUNTRY:  U.S.A.
;      ZIP:  90071
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  3.5" Diskette, 1.44 Mb
;      MEDIUM TYPE:  storage
;      COMPUTER:  IBM Compatible
;      OPERATING SYSTEM:  IBM P.C. DOS 5.0
;      SOFTWARE:  Word Perfect 5.1
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/363,240A
;      FILING DATE:  December 23, 1994
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:
;      FILING DATE:
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Warburg, Richard
;      REGISTRATION NUMBER:  32,327
;      REFERENCE/DOCKET NUMBER:  210/096
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  (213) 489-1600
;      TELEFAX:  (213) 955-0440
;      TELEX:  67-3510
;  INFORMATION FOR SEQ ID NO:  143:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  15 base pairs
;      TYPE:  nucleic acid
;      STRANDEDNESS:  single
;      TOPOLOGY:  linear
US-08-363-240A-143

  Query Match             1.4%;  Score 12;  DB 1;  Length 15;
  Best Local Similarity   100.0%;  Pred. No. 37;
  Matches   12;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        695 CTTGGAAGATTT 706
              ||||||||||||
Db         15 CTTGGAAGATTT 4


RESULT 53
US-08-635-309-24/c
; Sequence 24, Application US/08635309
; Patent No. 5709997
;  GENERAL INFORMATION:
;    APPLICANT:  Ronald L. Marshall
;    APPLICANT:  Cynthia Jou
;    APPLICANT:  John N. Simons
;    APPLICANT:  Thomas P. Leary
;    APPLICANT:  A. Scott Muerhoff
;    APPLICANT:  Suresh M. Desai
;    APPLICANT:  Isa K. Mushahwar
;    TITLE OF INVENTION:  NUCLEIC ACID DETECTION OF HEPATITIS GB VIRUS
;    NUMBER OF SEQUENCES:  31
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Abbott Laboratories
;      STREET:  100 Abbott Park Road
;      CITY:  Abbott Park
;      STATE:  Illinois
;      COUNTRY:  USA
;      ZIP:  60064-3500
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release 1.0, Version 1.30
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/635,309
;      FILING DATE:
;      CLASSIFICATION:  424
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Priscilla E. Porembski
;      REGISTRATION NUMBER:  33,207
;      REFERENCE/DOCKET NUMBER:  5792.US.01
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  708/937-0378
;      TELEFAX:  708/938-2623
;      TELEX:
;  INFORMATION FOR SEQ ID NO:  24:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  15 base pairs
;      TYPE:  nucleic acid
;      STRANDEDNESS:  single
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  synthetic DNA
US-08-635-309-24

  Query Match             1.4%;  Score 12;  DB 1;  Length 15;
  Best Local Similarity   100.0%;  Pred. No. 37;
  Matches   12;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy         90 TGAAGGGCGACG 101
              ||||||||||||
Db         13 TGAAGGGCGACG 2


RESULT 54
US-08-585-684B-2103/c
; Sequence 2103, Application US/08585684B
; Patent No. 5877021
;  GENERAL INFORMATION:
```

```
;    APPLICANT:  Stinchcomb, Daniel T.
;    APPLICANT:  Jarvis, Thale
;    APPLICANT:  McSwiggen, James
;    TITLE OF INVENTION:  METHOD AND REAGENT FOR THE
;    TITLE OF INVENTION:  INDUCTION OF GRAFT TOLERANCE
;    TITLE OF INVENTION:  AND REVERSAL OF IMMUNE RESPONSES
;    NUMBER OF SEQUENCES:  2751
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Lyon & Lyon
;      STREET:  633 West Fifth Street
;      STREET:  Suite 4700
;      CITY:  Los Angeles
;      STATE:  California
;      COUNTRY:  U.S.A.
;      ZIP:  90071
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  3.5" Diskette, 1.44 Mb
;      MEDIUM TYPE:  storage
;      COMPUTER:  IBM Compatible
;      OPERATING SYSTEM:  IBM P.C. DOS 5.0
;      SOFTWARE:  FastSEQ Version 1.5
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/585,684B
;      FILING DATE:  January 16, 1996
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  60/000,951
;      FILING DATE:  July 7, 1995
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Warburg, Richard
;      REGISTRATION NUMBER:  32,327
;      REFERENCE/DOCKET NUMBER:  218/078
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  (213) 489-1600
;      TELEFAX:  (213) 955-0440
;      TELEX:  67-3510
;  INFORMATION FOR SEQ ID NO:  2103:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  15 base pairs
;      TYPE:  nucleic acid
;      STRANDEDNESS:  single
;      TOPOLOGY:  linear
US-08-585-684B-2103

  Query Match             1.4%;  Score 12;  DB 1;  Length 15;
  Best Local Similarity   100.0%;  Pred. No. 37;
  Matches   12;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        431 AAAGCAGATGAC 442
              ||||||||||||
Db         14 AAAGCAGATGAC 3


RESULT 55
US-09-038-073-2103/c
; Sequence 2103, Application US/09038073
; Patent No. 6194150
;  GENERAL INFORMATION:
;    APPLICANT:  Stinchcomb, Daniel T.
;    APPLICANT:  Jarvis, Thale
;    APPLICANT:  McSwiggen, James
;    TITLE OF INVENTION:  METHOD AND REAGENT FOR THE
;    TITLE OF INVENTION:  INDUCTION OF GRAFT TOLERANCE
;    TITLE OF INVENTION:  AND REVERSAL OF IMMUNE RESPONSES
;    NUMBER OF SEQUENCES:  2751
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Lyon & Lyon
;      STREET:  633 West Fifth Street
;      STREET:  Suite 4700
;      CITY:  Los Angeles
;      STATE:  California
;      COUNTRY:  U.S.A.
;      ZIP:  90071
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  3.5" Diskette, 1.44 Mb
;      MEDIUM TYPE:  storage
;      COMPUTER:  IBM Compatible
;      OPERATING SYSTEM:  IBM P.C. DOS 5.0
;      SOFTWARE:  FastSEQ Version 1.5
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/09/038,073
;      FILING DATE:
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  08/585,684
;      FILING DATE:
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Warburg, Richard
;      REGISTRATION NUMBER:  32,327
;      REFERENCE/DOCKET NUMBER:  218/078
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  (213) 489-1600
;      TELEFAX:  (213) 955-0440
;      TELEX:  67-3510
;  INFORMATION FOR SEQ ID NO:  2103:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  15 base pairs
;      TYPE:  nucleic acid
;      STRANDEDNESS:  single
;      TOPOLOGY:  linear
US-09-038-073-2103

  Query Match             1.4%;  Score 12;  DB 1;  Length 15;
  Best Local Similarity   100.0%;  Pred. No. 37;
  Matches   12;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        431 AAAGCAGATGAC 442
              ||||||||||||
Db         14 AAAGCAGATGAC 3


Search completed: April 14, 2005, 16:47:12
Job time : 0.001 secs
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GenCore version 5.1.6

OM nucleic - nucleic search, using sw model

Run on: April 14, 2005, 16:49:38 ; Search time 2 Seconds
(without alignments)
5.577 Million cell updates/sec

Title: US-10-672-866-3
Perfect score: 874
Sequence: 1 ctgcagcgtctggggtttcc.....tattaaaagaatccaaattc 874

Scoring table: IDENTITY_NUC
Gapop 10.0 , Gapext 0.5

Searched: 317 seqs, 6381 residues

Total number of hits satisfying chosen parameters: 634

Minimum DB seq length: 8
Maximum DB seq length: 50

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 321 summaries

Database : rnpb3.seq:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

	Result No.	Score	% Query Match	Length	DB	ID	Description
	1	50	5.7	50	1	US-10-131-827-305	Sequence 305, App
	2	50	5.7	50	1	US-10-131-827-1951	Sequence 1951, Ap
	3	48	5.5	48	1	US-10-301-516-27	Sequence 27, Appl
	4	48	5.5	48	1	US-10-700-816-7	Sequence 7, Appli
	5	46.4	5.3	48	1	US-10-301-516-28	Sequence 28, Appl
	6	46.4	5.3	48	1	US-10-700-816-8	Sequence 8, Appli
	7	35	4.0	35	1	US-10-301-516-32	Sequence 32, Appl
	8	35	4.0	35	1	US-10-700-816-15	Sequence 15, Appl
c	9	27	3.1	27	1	US-09-899-807-1	Sequence 1, Appli
	10	23	2.6	23	1	US-09-899-807-3	Sequence 3, Appli
c	11	23	2.6	23	1	US-09-899-807-4	Sequence 4, Appli
	12	22.4	2.6	25	1	US-10-719-900-61538	Sequence 61538, A
c	13	22.2	2.5	27	1	US-10-333-578-13	Sequence 13, Appl
	14	22	2.5	27	1	US-10-333-578-12	Sequence 12, Appl
	15	21	2.4	21	1	US-10-109-349A-52	Sequence 52, Appl
c	16	21	2.4	21	1	US-10-109-349A-53	Sequence 53, Appl
	17	21	2.4	21	1	US-10-633-843-6	Sequence 6, Appli
	18	21	2.4	21	1	US-10-672-866-6	Sequence 6, Appli
	19	21	2.4	25	1	US-10-719-900-826010	Sequence 826010,
	20	20.8	2.4	25	1	US-10-719-900-61537	Sequence 61537, A
	21	20.4	2.3	25	1	US-10-719-900-456063	Sequence 456063,
	22	20.2	2.3	25	1	US-10-719-900-284833	Sequence 284833,
	23	20.2	2.3	25	1	US-10-719-900-458198	Sequence 458198,
	24	20.2	2.3	25	1	US-10-719-900-458199	Sequence 458199,
	25	20.2	2.3	25	1	US-10-719-900-889725	Sequence 889725,
	26	20.2	2.3	25	1	US-10-719-900-889726	Sequence 889726,
	27	20.2	2.3	25	1	US-10-719-900-893797	Sequence 893797,
c	28	20.2	2.3	25	1	US-10-719-900-967669	Sequence 967669,
	29	20	2.3	20	1	US-10-633-843-4	Sequence 4, Appli
c	30	20	2.3	20	1	US-10-633-843-5	Sequence 5, Appli
c	31	20	2.3	20	1	US-10-633-843-13	Sequence 13, Appl
c	32	20	2.3	20	1	US-10-633-843-14	Sequence 14, Appl
c	33	20	2.3	20	1	US-10-633-843-15	Sequence 15, Appl
c	34	20	2.3	20	1	US-10-633-843-16	Sequence 16, Appl
c	35	20	2.3	20	1	US-10-633-843-17	Sequence 17, Appl
c	36	20	2.3	20	1	US-10-633-843-18	Sequence 18, Appl
c	37	20	2.3	20	1	US-10-633-843-19	Sequence 19, Appl
c	38	20	2.3	20	1	US-10-633-843-20	Sequence 20, Appl
c	39	20	2.3	20	1	US-10-633-843-21	Sequence 21, Appl
c	40	20	2.3	20	1	US-10-633-843-22	Sequence 22, Appl
c	41	20	2.3	20	1	US-10-633-843-23	Sequence 23, Appl
c	42	20	2.3	20	1	US-10-633-843-24	Sequence 24, Appl
c	43	20	2.3	20	1	US-10-633-843-25	Sequence 25, Appl
c	44	20	2.3	20	1	US-10-633-843-26	Sequence 26, Appl
c	45	20	2.3	20	1	US-10-633-843-27	Sequence 27, Appl
c	46	20	2.3	20	1	US-10-633-843-28	Sequence 28, Appl
c	47	20	2.3	20	1	US-10-633-843-29	Sequence 29, Appl
c	48	20	2.3	20	1	US-10-633-843-30	Sequence 30, Appl
c	49	20	2.3	20	1	US-10-633-843-31	Sequence 31, Appl
c	50	20	2.3	20	1	US-10-633-843-32	Sequence 32, Appl
c	51	20	2.3	20	1	US-10-633-843-33	Sequence 33, Appl
c	52	20	2.3	20	1	US-10-633-843-34	Sequence 34, Appl
c	53	20	2.3	20	1	US-10-633-843-35	Sequence 35, Appl
c	54	20	2.3	20	1	US-10-633-843-36	Sequence 36, Appl
c	55	20	2.3	20	1	US-10-633-843-37	Sequence 37, Appl
c	56	20	2.3	20	1	US-10-633-843-38	Sequence 38, Appl
c	57	20	2.3	20	1	US-10-633-843-39	Sequence 39, Appl
c	58	20	2.3	20	1	US-10-633-843-40	Sequence 40, Appl
c	59	20	2.3	20	1	US-10-633-843-41	Sequence 41, Appl
c	60	20	2.3	20	1	US-10-633-843-42	Sequence 42, Appl
c	61	20	2.3	20	1	US-10-633-843-43	Sequence 43, Appl
c	62	20	2.3	20	1	US-10-633-843-44	Sequence 44, Appl
c	63	20	2.3	20	1	US-10-633-843-45	Sequence 45, Appl
c	64	20	2.3	20	1	US-10-633-843-46	Sequence 46, Appl
c	65	20	2.3	20	1	US-10-633-843-47	Sequence 47, Appl
c	66	20	2.3	20	1	US-10-633-843-48	Sequence 48, Appl
c	67	20	2.3	20	1	US-10-633-843-49	Sequence 49, Appl
c	68	20	2.3	20	1	US-10-633-843-50	Sequence 50, Appl
c	69	20	2.3	20	1	US-10-633-843-51	Sequence 51, Appl
c	70	20	2.3	20	1	US-10-633-843-52	Sequence 52, Appl
c	71	20	2.3	20	1	US-10-633-843-53	Sequence 53, Appl
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c	75	20	2.3	20	1	US-10-633-843-57	Sequence 57, Appl
c	76	20	2.3	20	1	US-10-633-843-58	Sequence 58, Appl
c	77	20	2.3	20	1	US-10-633-843-59	Sequence 59, Appl
c	78	20	2.3	20	1	US-10-633-843-60	Sequence 60, Appl
c	79	20	2.3	20	1	US-10-633-843-61	Sequence 61, Appl
c	80	20	2.3	20	1	US-10-633-843-62	Sequence 62, Appl
c	81	20	2.3	20	1	US-10-633-843-63	Sequence 63, Appl
c	82	20	2.3	20	1	US-10-633-843-64	Sequence 64, Appl
c	83	20	2.3	20	1	US-10-633-843-65	Sequence 65, Appl
c	84	20	2.3	20	1	US-10-633-843-66	Sequence 66, Appl
c	85	20	2.3	20	1	US-10-633-843-67	Sequence 67, Appl
c	86	20	2.3	20	1	US-10-633-843-68	Sequence 68, Appl
c	87	20	2.3	20	1	US-10-633-843-69	Sequence 69, Appl
c	88	20	2.3	20	1	US-10-633-843-70	Sequence 70, Appl
c	89	20	2.3	20	1	US-10-633-843-71	Sequence 71, Appl
c	90	20	2.3	20	1	US-10-633-843-72	Sequence 72, Appl
c	91	20	2.3	20	1	US-10-633-843-73	Sequence 73, Appl
c	92	20	2.3	20	1	US-10-633-843-74	Sequence 74, Appl
c	93	20	2.3	20	1	US-10-633-843-75	Sequence 75, Appl
c	94	20	2.3	20	1	US-10-633-843-76	Sequence 76, Appl
c	95	20	2.3	20	1	US-10-633-843-77	Sequence 77, Appl
	96	20	2.3	20	1	US-10-672-866-4	Sequence 4, Appli
c	97	20	2.3	20	1	US-10-672-866-5	Sequence 5, Appli
c	98	20	2.3	20	1	US-10-672-866-13	Sequence 13, Appl
c	99	20	2.3	20	1	US-10-672-866-14	Sequence 14, Appl
c	100	20	2.3	20	1	US-10-672-866-15	Sequence 15, Appl
c	101	20	2.3	20	1	US-10-672-866-16	Sequence 16, Appl
c	102	20	2.3	20	1	US-10-672-866-17	Sequence 17, Appl
c	103	20	2.3	20	1	US-10-672-866-18	Sequence 18, Appl
c	104	20	2.3	20	1	US-10-672-866-19	Sequence 19, Appl
c	105	20	2.3	20	1	US-10-672-866-20	Sequence 20, Appl
c	106	20	2.3	20	1	US-10-672-866-21	Sequence 21, Appl

c 107	20	2.3	20	1	US-10-672-866-22	Sequence 22, Appl
c 108	20	2.3	20	1	US-10-672-866-23	Sequence 23, Appl
c 109	20	2.3	20	1	US-10-672-866-24	Sequence 24, Appl
c 110	20	2.3	20	1	US-10-672-866-25	Sequence 25, Appl
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c 113	20	2.3	20	1	US-10-672-866-28	Sequence 28, Appl
c 114	20	2.3	20	1	US-10-672-866-29	Sequence 29, Appl
c 115	20	2.3	20	1	US-10-672-866-30	Sequence 30, Appl
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c 117	20	2.3	20	1	US-10-672-866-32	Sequence 32, Appl
c 118	20	2.3	20	1	US-10-672-866-33	Sequence 33, Appl
c 119	20	2.3	20	1	US-10-672-866-34	Sequence 34, Appl
c 120	20	2.3	20	1	US-10-672-866-35	Sequence 35, Appl
c 121	20	2.3	20	1	US-10-672-866-36	Sequence 36, Appl
c 122	20	2.3	20	1	US-10-672-866-37	Sequence 37, Appl
c 123	20	2.3	20	1	US-10-672-866-38	Sequence 38, Appl
c 124	20	2.3	20	1	US-10-672-866-39	Sequence 39, Appl
c 125	20	2.3	20	1	US-10-672-866-40	Sequence 40, Appl
c 126	20	2.3	20	1	US-10-672-866-41	Sequence 41, Appl
c 127	20	2.3	20	1	US-10-672-866-42	Sequence 42, Appl
c 128	20	2.3	20	1	US-10-672-866-43	Sequence 43, Appl
c 129	20	2.3	20	1	US-10-672-866-44	Sequence 44, Appl
c 130	20	2.3	20	1	US-10-672-866-45	Sequence 45, Appl
c 131	20	2.3	20	1	US-10-672-866-46	Sequence 46, Appl
c 132	20	2.3	20	1	US-10-672-866-47	Sequence 47, Appl
c 133	20	2.3	20	1	US-10-672-866-48	Sequence 48, Appl
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c 139	20	2.3	20	1	US-10-672-866-54	Sequence 54, Appl
c 140	20	2.3	20	1	US-10-672-866-55	Sequence 55, Appl
c 141	20	2.3	20	1	US-10-672-866-56	Sequence 56, Appl
c 142	20	2.3	20	1	US-10-672-866-57	Sequence 57, Appl
c 143	20	2.3	20	1	US-10-672-866-58	Sequence 58, Appl
c 144	20	2.3	20	1	US-10-672-866-59	Sequence 59, Appl
c 145	20	2.3	20	1	US-10-672-866-60	Sequence 60, Appl
c 146	20	2.3	20	1	US-10-672-866-61	Sequence 61, Appl
c 147	20	2.3	20	1	US-10-672-866-62	Sequence 62, Appl
c 148	20	2.3	20	1	US-10-672-866-63	Sequence 63, Appl
c 149	20	2.3	20	1	US-10-672-866-64	Sequence 64, Appl
c 150	20	2.3	20	1	US-10-672-866-65	Sequence 65, Appl
c 151	20	2.3	20	1	US-10-672-866-66	Sequence 66, Appl
c 152	20	2.3	20	1	US-10-672-866-67	Sequence 67, Appl
c 153	20	2.3	20	1	US-10-672-866-68	Sequence 68, Appl
c 154	20	2.3	20	1	US-10-672-866-69	Sequence 69, Appl
c 155	20	2.3	20	1	US-10-672-866-70	Sequence 70, Appl
c 156	20	2.3	20	1	US-10-672-866-71	Sequence 71, Appl
c 157	20	2.3	20	1	US-10-672-866-72	Sequence 72, Appl
c 158	20	2.3	20	1	US-10-672-866-73	Sequence 73, Appl
c 159	20	2.3	20	1	US-10-672-866-74	Sequence 74, Appl
c 160	20	2.3	20	1	US-10-672-866-75	Sequence 75, Appl
c 161	20	2.3	20	1	US-10-672-866-76	Sequence 76, Appl
c 162	20	2.3	20	1	US-10-672-866-77	Sequence 77, Appl
c 163	20	2.3	20	1	US-10-672-866-91	Sequence 91, Appl
c 164	20	2.3	20	1	US-10-672-866-92	Sequence 92, Appl
c 165	20	2.3	20	1	US-10-672-866-93	Sequence 93, Appl
c 166	20	2.3	20	1	US-10-672-866-94	Sequence 94, Appl
c 167	20	2.3	20	1	US-10-672-866-95	Sequence 95, Appl
c 168	20	2.3	20	1	US-10-672-866-96	Sequence 96, Appl
c 169	20	2.3	20	1	US-10-672-866-97	Sequence 97, Appl
c 170	20	2.3	20	1	US-10-672-866-98	Sequence 98, Appl
c 171	20	2.3	20	1	US-10-672-866-99	Sequence 99, Appl
c 172	20	2.3	20	1	US-10-672-866-100	Sequence 100, App
c 173	20	2.3	20	1	US-10-672-866-101	Sequence 101, App
c 174	20	2.3	20	1	US-10-672-866-102	Sequence 102, App
c 175	20	2.3	20	1	US-10-672-866-103	Sequence 103, App
c 176	20	2.3	20	1	US-10-672-866-104	Sequence 104, App
c 177	20	2.3	20	1	US-10-672-866-105	Sequence 105, App
c 178	20	2.3	20	1	US-10-672-866-106	Sequence 106, App
c 179	20	2.3	20	1	US-10-672-866-107	Sequence 107, App
c 180	20	2.3	20	1	US-10-672-866-108	Sequence 108, App
c 181	20	2.3	20	1	US-10-672-866-109	Sequence 109, App
c 182	20	2.3	20	1	US-10-672-866-110	Sequence 110, App
c 183	20	2.3	20	1	US-10-672-866-111	Sequence 111, App
c 184	20	2.3	20	1	US-10-672-866-112	Sequence 112, App
c 185	20	2.3	20	1	US-10-672-866-113	Sequence 113, App
c 186	20	2.3	20	1	US-10-672-866-114	Sequence 114, App
c 187	20	2.3	20	1	US-10-672-866-115	Sequence 115, App
c 188	20	2.3	20	1	US-10-672-866-116	Sequence 116, App
c 189	20	2.3	20	1	US-10-672-866-117	Sequence 117, App
c 190	20	2.3	20	1	US-10-672-866-118	Sequence 118, App
c 191	20	2.3	20	1	US-10-672-866-119	Sequence 119, App
c 192	20	2.3	20	1	US-10-672-866-120	Sequence 120, App
c 193	20	2.3	20	1	US-10-672-866-121	Sequence 121, App
c 194	20	2.3	20	1	US-10-672-866-122	Sequence 122, App
c 195	20	2.3	20	1	US-10-672-866-123	Sequence 123, App
c 196	20	2.3	20	1	US-10-672-866-124	Sequence 124, App
c 197	20	2.3	20	1	US-10-672-866-125	Sequence 125, App
c 198	20	2.3	20	1	US-10-672-866-126	Sequence 126, App
c 199	20	2.3	20	1	US-10-672-866-127	Sequence 127, App
c 200	20	2.3	20	1	US-10-672-866-128	Sequence 128, App
c 201	20	2.3	20	1	US-10-672-866-129	Sequence 129, App
c 202	20	2.3	20	1	US-10-672-866-130	Sequence 130, App
c 203	20	2.3	20	1	US-10-672-866-138	Sequence 138, App
c 204	20	2.3	20	1	US-10-672-866-168	Sequence 168, App
c 205	20	2.3	20	1	US-10-672-866-169	Sequence 169, App
c 206	20	2.3	20	1	US-10-672-866-170	Sequence 170, App
c 207	20	2.3	20	1	US-10-672-866-250	Sequence 250, App
c 208	20	2.3	20	1	US-10-672-866-314	Sequence 314, App
209	20	2.3	21	1	US-10-301-516-29	Sequence 29, Appl
210	20	2.3	25	1	US-10-700-816-9	Sequence 9, Appli
211	19.4	2.2	21	1	US-10-301-516-17	Sequence 17, Appl
c 212	19.4	2.2	21	1	US-10-301-516-18	Sequence 18, Appl
213	19.4	2.2	21	1	US-10-301-516-30	Sequence 30, Appl
214	19	2.2	21	1	US-10-301-516-31	Sequence 31, Appl
c 215	19	2.2	21	1	US-10-301-516-37	Sequence 37, Appl
c 216	19	2.2	21	1	US-10-301-516-38	Sequence 38, Appl
c 217	19	2.2	21	1	US-10-301-516-39	Sequence 39, Appl
c 218	18.4	2.1	20	1	US-10-672-866-167	Sequence 167, App
c 219	18.4	2.1	20	1	US-10-672-866-171	Sequence 171, App
c 220	18.4	2.1	20	1	US-10-672-866-188	Sequence 188, App
c 221	18.4	2.1	20	1	US-10-672-866-189	Sequence 189, App
c 222	18.4	2.1	20	1	US-10-672-866-249	Sequence 249, App
c 223	18.4	2.1	20	1	US-10-672-866-298	Sequence 298, App
224	18.4	2.1	21	1	US-10-301-516-26	Sequence 26, Appl
c 225	18	2.1	18	1	US-10-672-866-315	Sequence 315, App
226	17.8	2.0	21	1	US-10-301-516-25	Sequence 25, Appl
227	17.4	2.0	19	1	US-10-301-516-15	Sequence 15, Appl
c 228	17.4	2.0	19	1	US-10-301-516-16	Sequence 16, Appl
c 229	17.4	2.0	20	1	US-10-672-866-286	Sequence 286, App
230	17.4	2.0	21	1	US-10-301-516-24	Sequence 24, Appl
c 231	17.4	2.0	21	1	US-10-301-516-34	Sequence 34, Appl
c 232	17.4	2.0	21	1	US-10-301-516-35	Sequence 35, Appl
c 233	17.4	2.0	21	1	US-10-301-516-36	Sequence 36, Appl
c 234	16.8	1.9	20	1	US-10-672-866-194	Sequence 194, App
c 235	16.8	1.9	20	1	US-10-672-866-195	Sequence 195, App
c 236	16.8	1.9	20	1	US-10-672-866-199	Sequence 199, App
c 237	16.8	1.9	20	1	US-10-672-866-205	Sequence 205, App
c 238	16.8	1.9	20	1	US-10-672-866-207	Sequence 207, App
c 239	16.8	1.9	20	1	US-10-672-866-208	Sequence 208, App
c 240	16.8	1.9	20	1	US-10-672-866-209	Sequence 209, App
c 241	16.8	1.9	20	1	US-10-672-866-215	Sequence 215, App
c 242	16.8	1.9	20	1	US-10-672-866-287	Sequence 287, App
c 243	16.8	1.9	20	1	US-10-672-866-291	Sequence 291, App
c 244	16.8	1.9	20	1	US-10-672-866-296	Sequence 296, App
c 245	16.8	1.9	20	1	US-10-672-866-297	Sequence 297, App
246	16.4	1.9	20	1	US-10-190-366-126	Sequence 126, App
c 247	16.4	1.9	20	1	US-10-190-366-323	Sequence 323, App
248	16	1.8	16	1	US-10-672-866-159	Sequence 159, App
c 249	16	1.8	18	1	US-10-333-429-260	Sequence 260, App
250	16	1.8	19	1	US-10-197-280A-27	Sequence 27, Appl
251	15.6	1.8	17	1	US-10-484-577-356	Sequence 356, App
c 252	15	1.7	15	1	US-10-672-866-139	Sequence 139, App

c 253	15	1.7	15	1	US-10-672-866-140	Sequence 140, App
c 254	15	1.7	15	1	US-10-672-866-148	Sequence 148, App
c 255	15	1.7	17	1	US-10-484-577-355	Sequence 355, App
c 256	14.4	1.6	17	1	US-09-863-086-102	Sequence 102, App
c 257	14.4	1.6	17	1	US-09-863-086-104	Sequence 104, App
c 258	14.4	1.6	17	1	US-09-780-533A-2234	Sequence 2234, Ap
259	14.4	1.6	17	1	US-09-780-533A-2326	Sequence 2326, Ap
c 260	14.4	1.6	17	1	US-10-672-238-102	Sequence 102, App
c 261	14.4	1.6	17	1	US-10-672-238-104	Sequence 104, App
c 262	14.4	1.6	17	1	US-10-484-577-353	Sequence 353, App
263	14.4	1.6	17	1	US-10-484-577-354	Sequence 354, App
264	14	1.6	17	1	US-09-864-785-2135	Sequence 2135, Ap
265	14	1.6	17	1	US-09-864-785-2949	Sequence 2949, Ap
c 266	14	1.6	17	1	US-09-780-533A-484	Sequence 484, App
c 267	14	1.6	17	1	US-09-780-533A-1349	Sequence 1349, Ap
c 268	14	1.6	17	1	US-09-780-533A-1996	Sequence 1996, Ap
269	14	1.6	20	1	US-10-633-843-54	Sequence 54, Appl
270	14	1.6	20	1	US-10-633-843-55	Sequence 55, Appl
271	14	1.6	20	1	US-10-672-866-54	Sequence 54, Appl
272	14	1.6	20	1	US-10-672-866-55	Sequence 55, Appl
273	13.8	1.6	17	1	US-09-866-108-8960	Sequence 8960, Ap
274	13.8	1.6	17	1	US-09-818-875-3142	Sequence 3142, Ap
c 275	13.8	1.6	17	1	US-09-818-875-3143	Sequence 3143, Ap
c 276	13.8	1.6	17	1	US-09-780-533A-1097	Sequence 1097, Ap
277	13.8	1.6	17	1	US-09-740-332-2757	Sequence 2757, Ap
278	13.8	1.6	17	1	US-09-817-879-2757	Sequence 2757, Ap
c 279	13.8	1.6	17	1	US-10-230-006-533	Sequence 533, App
c 280	13.8	1.6	17	1	US-10-230-006-534	Sequence 534, App
c 281	13.8	1.6	17	1	US-10-230-006-1258	Sequence 1258, Ap
282	13.8	1.6	17	1	US-10-209-787-3142	Sequence 3142, Ap
c 283	13.8	1.6	17	1	US-10-209-787-3143	Sequence 3143, Ap
284	13.8	1.6	17	1	US-10-261-185-3142	Sequence 3142, Ap
c 285	13.8	1.6	17	1	US-10-261-185-3143	Sequence 3143, Ap
c 286	13.8	1.6	17	1	US-10-138-674-2787	Sequence 2787, Ap
c 287	13.8	1.6	17	1	US-10-138-674-5100	Sequence 5100, Ap
288	13.8	1.6	17	1	US-10-138-674-6796	Sequence 6796, Ap
c 289	13.8	1.6	17	1	US-10-138-674-7893	Sequence 7893, Ap
c 290	13.8	1.6	17	1	US-10-287-949A-2787	Sequence 2787, Ap
c 291	13.8	1.6	17	1	US-10-287-949A-5100	Sequence 5100, Ap
292	13.8	1.6	17	1	US-10-287-949A-6796	Sequence 6796, Ap
c 293	13.8	1.6	17	1	US-10-287-949A-7893	Sequence 7893, Ap
294	13.8	1.6	17	1	US-10-669-841-5350	Sequence 5350, Ap
295	13.8	1.6	17	1	US-10-723-361-8960	Sequence 8960, Ap
296	13.8	1.6	17	1	US-10-681-074-3142	Sequence 3142, Ap
c 297	13.8	1.6	17	1	US-10-681-074-3143	Sequence 3143, Ap
c 298	13.8	1.6	17	1	US-10-712-633-1027	Sequence 1027, Ap
c 299	13.8	1.6	17	1	US-10-498-462-563	Sequence 563, App
300	13.4	1.5	15	1	US-10-641-960-157	Sequence 157, App
301	13.4	1.5	16	1	US-10-608-062-2	Sequence 2, Appli
c 302	13.4	1.5	16	1	US-10-138-674-5942	Sequence 5942, Ap
c 303	13.4	1.5	16	1	US-10-287-949A-5942	Sequence 5942, Ap
c 304	13	1.5	13	1	US-10-257-017B-154649	Sequence 154649,
305	13	1.5	13	1	US-10-257-017B-154650	Sequence 154650,
306	13	1.5	13	1	US-10-257-017B-156539	Sequence 156539,
c 307	13	1.5	13	1	US-10-257-017B-156540	Sequence 156540,
308	13	1.5	13	1	US-10-257-017B-201017	Sequence 201017,
c 309	13	1.5	13	1	US-10-257-017B-201018	Sequence 201018,
c 310	13	1.5	15	1	US-10-440-464-42	Sequence 42, Appl
311	13	1.5	16	1	US-10-138-674-7004	Sequence 7004, Ap
312	13	1.5	16	1	US-10-287-949A-7004	Sequence 7004, Ap
c 313	12.8	1.5	16	1	US-10-339-674-904	Sequence 904, App
314	12.8	1.5	16	1	US-10-339-674-905	Sequence 905, App
315	12.8	1.5	16	1	US-10-339-674-906	Sequence 906, App
c 316	12.8	1.5	16	1	US-10-138-674-5969	Sequence 5969, Ap
317	12.8	1.5	16	1	US-10-138-674-6103	Sequence 6103, Ap
c 318	12.8	1.5	16	1	US-10-287-949A-5969	Sequence 5969, Ap
319	12.8	1.5	16	1	US-10-287-949A-6103	Sequence 6103, Ap
c 320	12.6	1.4	13	1	US-10-257-017B-227623	Sequence 227623,
321	12.6	1.4	13	1	US-10-257-017B-227624	Sequence 227624,

ALIGNMENTS

```
RESULT 1
US-10-131-827-305
; Sequence 305, Application US/10131827
; Publication No. US20040009479A1
; GENERAL INFORMATION:
;  APPLICANT: Wohlgemuth, Jay
;  APPLICANT:  Fry, Kirk
;  APPLICANT:  Woodward, Robert
;  APPLICANT:  Ly, Ngoc
;  TITLE OF INVENTION: METHODS AND COMPOSITIONS FOR DIAGNOSING AND MONITORING AUTOIMMUNE
;  TITLE OF INVENTION:  CHRONIC INFLAMMATORY DISEASES
;  FILE REFERENCE: 506612000120
;  CURRENT APPLICATION NUMBER: US/10/131,827
;  CURRENT FILING DATE:  2002-09-06
;  PRIOR APPLICATION NUMBER: US 10/006,290
;  PRIOR FILING DATE: 2001-10-22
;  PRIOR APPLICATION NUMBER: US 60/296,764
;  PRIOR FILING DATE: 2001-06-08
;  NUMBER OF SEQ ID NOS: 9090
;  SOFTWARE: PatentIn version 3.1
; SEQ ID NO 305
;   LENGTH: 50
;   TYPE: DNA
;   ORGANISM: Homo sapiens
US-10-131-827-305

  Query Match             5.7%;  Score 50;  DB 1;  Length 50;
  Best Local Similarity   100.0%;  Pred. No. 0.54;
  Matches   50;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        530 ACATTCCCTTGGATGTAGTCTGAGGCCCCTTAACTCATCTGTTATCCTGC 579
              ||||||||||||||||||||||||||||||||||||||||||||||||||
Db          1 ACATTCCCTTGGATGTAGTCTGAGGCCCCTTAACTCATCTGTTATCCTGC 50


RESULT 2
US-10-131-827-1951
; Sequence 1951, Application US/10131827
; Publication No. US20040009479A1
; GENERAL INFORMATION:
;  APPLICANT: Wohlgemuth, Jay
;  APPLICANT:  Fry, Kirk
;  APPLICANT:  Woodward, Robert
;  APPLICANT:  Ly, Ngoc
;  TITLE OF INVENTION: METHODS AND COMPOSITIONS FOR DIAGNOSING AND MONITORING AUTOIMMUNE
;  TITLE OF INVENTION:  CHRONIC INFLAMMATORY DISEASES
;  FILE REFERENCE: 506612000120
;  CURRENT APPLICATION NUMBER: US/10/131,827
;  CURRENT FILING DATE:  2002-09-06
;  PRIOR APPLICATION NUMBER: US 10/006,290
;  PRIOR FILING DATE: 2001-10-22
;  PRIOR APPLICATION NUMBER: US 60/296,764
;  PRIOR FILING DATE: 2001-06-08
;  NUMBER OF SEQ ID NOS: 9090
;  SOFTWARE: PatentIn version 3.1
; SEQ ID NO 1951
;   LENGTH: 50
;   TYPE: DNA
;   ORGANISM: Homo sapiens
US-10-131-827-1951

  Query Match             5.7%;  Score 50;  DB 1;  Length 50;
  Best Local Similarity   100.0%;  Pred. No. 0.54;
  Matches   50;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        530 ACATTCCCTTGGATGTAGTCTGAGGCCCCTTAACTCATCTGTTATCCTGC 579
              ||||||||||||||||||||||||||||||||||||||||||||||||||
Db          1 ACATTCCCTTGGATGTAGTCTGAGGCCCCTTAACTCATCTGTTATCCTGC 50


RESULT 3
US-10-301-516-27
```

; Sequence 27, Application US/10301516
; Publication No. US20030180756A1
; GENERAL INFORMATION:
; APPLICANT: SHI, YANG
; APPLICANT: SUI, GUANGCHAO
; TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR SUPPRESSING EUKARYOTIC GENE
; TITLE OF INVENTION: EXPRESSION
; FILE REFERENCE: HMV-084.01
; CURRENT APPLICATION NUMBER: US/10/301,516
; CURRENT FILING DATE: 2002-11-21
; PRIOR APPLICATION NUMBER: 60/366,478
; PRIOR FILING DATE: 2002-03-21
; NUMBER OF SEQ ID NOS: 39
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 27
; LENGTH: 48
; TYPE: RNA
; ORGANISM: Unknown Organism
; FEATURE:
; OTHER INFORMATION: Description of Unknown Organism: Unknown
; OTHER INFORMATION: sod1 wild-type
US-10-301-516-27

Query Match 5.5%; Score 48; DB 1; Length 48;
Best Local Similarity 77.1%; Pred. No. 0.76;
Matches 37; Conservative 11; Mismatches 0; Indels 0; Gaps 0;

Qy 299 GAGAGGCATGTTGGAGACTTGGGCAATGTGACTGCTGACAAAGATGGT 346
||||||||:|::||||||::||||||:|:|||:||:||||||||:||:
Db 1 GAGAGGCAUGUUGGAGACUUGGGCAAUGUGACUGCUGACAAAGAUGGU 48

RESULT 4
US-10-700-816-7
; Sequence 7, Application US/10700816
; Publication No. US20040192629A1
; GENERAL INFORMATION:
; APPLICANT: Xu, Zuoshang
; TITLE OF INVENTION: Allele-Specific RNA Interference
; FILE REFERENCE: UMY-038
; CURRENT APPLICATION NUMBER: US/10/700,816
; CURRENT FILING DATE: 2003-11-04
; PRIOR APPLICATION NUMBER: 60/423,507
; PRIOR FILING DATE: 2002-11-04
; PRIOR APPLICATION NUMBER: 60/488,283
; PRIOR FILING DATE: 2003-07-18
; NUMBER OF SEQ ID NOS: 19
; SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 7
; LENGTH: 48
; TYPE: DNA
; ORGANISM: Homo sapiens
US-10-700-816-7

Query Match 5.5%; Score 48; DB 1; Length 48;
Best Local Similarity 77.1%; Pred. No. 0.76;
Matches 37; Conservative 11; Mismatches 0; Indels 0; Gaps 0;

Qy 299 GAGAGGCATGTTGGAGACTTGGGCAATGTGACTGCTGACAAAGATGGT 346
||||||||:|::||||||::||||||:|:|||:||:||||||||:||:
Db 1 GAGAGGCAUGUUGGAGACUUGGGCAAUGUGACUGCUGACAAAGAUGGU 48

RESULT 5
US-10-301-516-28
; Sequence 28, Application US/10301516
; Publication No. US20030180756A1
; GENERAL INFORMATION:
; APPLICANT: SHI, YANG
; APPLICANT: SUI, GUANGCHAO
; TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR SUPPRESSING EUKARYOTIC GENE
; TITLE OF INVENTION: EXPRESSION
; FILE REFERENCE: HMV-084.01
; CURRENT APPLICATION NUMBER: US/10/301,516
; CURRENT FILING DATE: 2002-11-21
; PRIOR APPLICATION NUMBER: 60/366,478
; PRIOR FILING DATE: 2002-03-21
; NUMBER OF SEQ ID NOS: 39
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 28
; LENGTH: 48
; TYPE: RNA
; ORGANISM: Unknown Organism
; FEATURE:
; OTHER INFORMATION: Description of Unknown Organism: Unknown
; OTHER INFORMATION: sod1 mutant
US-10-301-516-28

Query Match 5.3%; Score 46.4; DB 1; Length 48;
Best Local Similarity 75.0%; Pred. No. 1;
Matches 36; Conservative 11; Mismatches 1; Indels 0; Gaps 0;

Qy 299 GAGAGGCATGTTGGAGACTTGGGCAATGTGACTGCTGACAAAGATGGT 346
||||||||:|::||||||::| ||||:|:|||:||:||||||||:||:
Db 1 GAGAGGCAUGUUGGAGACUUGCGCAAUGUGACUGCUGACAAAGAUGGU 48

RESULT 6
US-10-700-816-8
; Sequence 8, Application US/10700816
; Publication No. US20040192629A1
; GENERAL INFORMATION:
; APPLICANT: Xu, Zuoshang
; TITLE OF INVENTION: Allele-Specific RNA Interference
; FILE REFERENCE: UMY-038
; CURRENT APPLICATION NUMBER: US/10/700,816
; CURRENT FILING DATE: 2003-11-04
; PRIOR APPLICATION NUMBER: 60/423,507
; PRIOR FILING DATE: 2002-11-04
; PRIOR APPLICATION NUMBER: 60/488,283
; PRIOR FILING DATE: 2003-07-18
; NUMBER OF SEQ ID NOS: 19
; SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 8
; LENGTH: 48
; TYPE: DNA
; ORGANISM: Homo sapiens
US-10-700-816-8

Query Match 5.3%; Score 46.4; DB 1; Length 48;
Best Local Similarity 75.0%; Pred. No. 1;
Matches 36; Conservative 11; Mismatches 1; Indels 0; Gaps 0;

Qy 299 GAGAGGCATGTTGGAGACTTGGGCAATGTGACTGCTGACAAAGATGGT 346
||||||||:|::||||||::| ||||:|:|||:||:||||||||:||:
Db 1 GAGAGGCAUGUUGGAGACUUGCGCAAUGUGACUGCUGACAAAGAUGGU 48

RESULT 7
US-10-301-516-32
; Sequence 32, Application US/10301516
; Publication No. US20030180756A1
; GENERAL INFORMATION:
; APPLICANT: SHI, YANG
; APPLICANT: SUI, GUANGCHAO
; TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR SUPPRESSING EUKARYOTIC GENE
; TITLE OF INVENTION: EXPRESSION
; FILE REFERENCE: HMV-084.01
; CURRENT APPLICATION NUMBER: US/10/301,516
; CURRENT FILING DATE: 2002-11-21
; PRIOR APPLICATION NUMBER: 60/366,478
; PRIOR FILING DATE: 2002-03-21
; NUMBER OF SEQ ID NOS: 39
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 32
; LENGTH: 35

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;   TYPE: DNA
;   ORGANISM: Unknown Organism
;   FEATURE:
;   OTHER INFORMATION: Description of Unknown Organism: Unknown
;   OTHER INFORMATION: wild-type sod1
US-10-301-516-32

  Query Match             4.0%;  Score 35;  DB 1;  Length 35;
  Best Local Similarity   100.0%;  Pred. No. 7.2;
  Matches   35;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        329 ACTGCTGACAAAGATGGTGTGGCCGATGTGTCTAT 363
              |||||||||||||||||||||||||||||||||||
Db          1 ACTGCTGACAAAGATGGTGTGGCCGATGTGTCTAT 35


RESULT 8
US-10-700-816-15
; Sequence 15, Application US/10700816
; Publication No. US20040192629A1
; GENERAL INFORMATION:
;  APPLICANT: Xu, Zuoshang
;  TITLE OF INVENTION: Allele-Specific RNA Interference
;  FILE REFERENCE: UMY-038
;  CURRENT APPLICATION NUMBER: US/10/700,816
;  CURRENT FILING DATE:  2003-11-04
;  PRIOR APPLICATION NUMBER: 60/423,507
;  PRIOR FILING DATE: 2002-11-04
;  PRIOR APPLICATION NUMBER: 60/488,283
;  PRIOR FILING DATE: 2003-07-18
;  NUMBER OF SEQ ID NOS: 19
;  SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 15
;   LENGTH: 35
;   TYPE: DNA
;   ORGANISM: Homo sapiens
US-10-700-816-15

  Query Match             4.0%;  Score 35;  DB 1;  Length 35;
  Best Local Similarity   100.0%;  Pred. No. 7.2;
  Matches   35;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        329 ACTGCTGACAAAGATGGTGTGGCCGATGTGTCTAT 363
              |||||||||||||||||||||||||||||||||||
Db          1 ACTGCTGACAAAGATGGTGTGGCCGATGTGTCTAT 35


RESULT 9
US-09-899-807-1/c
; Sequence 1, Application US/09899807
; Patent No. US20020106348A1
; GENERAL INFORMATION:
;  APPLICANT: HUANG, PENG
;  APPLICANT:  PLUNKETT, WILLIAM
;  APPLICANT:  FENG, LI
;  TITLE OF INVENTION: CANCER THERAPEUTICS INVOLVING THE ADMINISTRATION OF
;  TITLE OF INVENTION:  2-METHOXYESTRADIOL AND AN AGENT THAT INCREASES
;  TITLE OF INVENTION:  INTRACELLULAR SUPEROXIDE ANION
;  FILE REFERENCE: UTSC:618US
;  CURRENT APPLICATION NUMBER: US/09/899,807
;  CURRENT FILING DATE:  2001-07-05
;  NUMBER OF SEQ ID NOS: 6
;  SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 1
;   LENGTH: 27
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Description of Artificial Sequence:  Synthetic
;   OTHER INFORMATION: Primer
US-09-899-807-1

  Query Match             3.1%;  Score 27;  DB 1;  Length 27;
  Best Local Similarity   100.0%;  Pred. No. 27;
  Matches   27;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy         61 AGTTATGGCGACGAAGGCCGTGTGCGT 87
              ||||||||||||||||||||||||||||
Db         27 AGTTATGGCGACGAAGGCCGTGTGCGT 1


RESULT 10
US-09-899-807-3
; Sequence 3, Application US/09899807
; Patent No. US20020106348A1
; GENERAL INFORMATION:
;  APPLICANT: HUANG, PENG
;  APPLICANT:  PLUNKETT, WILLIAM
;  APPLICANT:  FENG, LI
;  TITLE OF INVENTION: CANCER THERAPEUTICS INVOLVING THE ADMINISTRATION OF
;  TITLE OF INVENTION:  2-METHOXYESTRADIOL AND AN AGENT THAT INCREASES
;  TITLE OF INVENTION:  INTRACELLULAR SUPEROXIDE ANION
;  FILE REFERENCE: UTSC:618US
;  CURRENT APPLICATION NUMBER: US/09/899,807
;  CURRENT FILING DATE:  2001-07-05
;  NUMBER OF SEQ ID NOS: 6
;  SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 3
;   LENGTH: 23
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Description of Artificial Sequence:  Synthetic
;   OTHER INFORMATION: Primer
US-09-899-807-3

  Query Match             2.6%;  Score 23;  DB 1;  Length 23;
  Best Local Similarity   100.0%;  Pred. No. 50;
  Matches   23;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy         71 ACGAAGGCCGTGTGCGTGCTGAA 93
              |||||||||||||||||||||||
Db          1 ACGAAGGCCGTGTGCGTGCTGAA 23


RESULT 11
US-09-899-807-4/c
; Sequence 4, Application US/09899807
; Patent No. US20020106348A1
; GENERAL INFORMATION:
;  APPLICANT: HUANG, PENG
;  APPLICANT:  PLUNKETT, WILLIAM
;  APPLICANT:  FENG, LI
;  TITLE OF INVENTION: CANCER THERAPEUTICS INVOLVING THE ADMINISTRATION OF
;  TITLE OF INVENTION:  2-METHOXYESTRADIOL AND AN AGENT THAT INCREASES
;  TITLE OF INVENTION:  INTRACELLULAR SUPEROXIDE ANION
;  FILE REFERENCE: UTSC:618US
;  CURRENT APPLICATION NUMBER: US/09/899,807
;  CURRENT FILING DATE:  2001-07-05
;  NUMBER OF SEQ ID NOS: 6
;  SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 4
;   LENGTH: 23
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Description of Artificial Sequence:  Synthetic
;   OTHER INFORMATION: Primer
US-09-899-807-4

  Query Match             2.6%;  Score 23;  DB 1;  Length 23;
  Best Local Similarity   100.0%;  Pred. No. 50;
  Matches   23;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        486 CTGGAAGTCGTTTGGCTTGTGGT 508
              |||||||||||||||||||||||
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Db         23 CTGGAAGTCGTTTGGCTTGTGGT 1


RESULT 12
US-10-719-900-61538
; Sequence 61538, Application US/10719900
; Publication No. US20050026164A1
; GENERAL INFORMATION:
;  APPLICANT: Xue Mei Zhou
;  TITLE OF INVENTION: Methods of Genetic Analysis of Mouse
;  FILE REFERENCE: 3528.1
;  CURRENT APPLICATION NUMBER: US/10/719,900
;  CURRENT FILING DATE:  2003-11-20
;  PRIOR APPLICATION NUMBER: 60/427,808
;  PRIOR FILING DATE: 2002 11 20
;  NUMBER OF SEQ ID NOS: 982914
;  SOFTWARE: Microarray Probe Sequence Listing Generator V 1.1
; SEQ ID NO 61538
;   LENGTH: 25
;   TYPE: DNA
;   ORGANISM: Mus musculus
US-10-719-900-61538

  Query Match             2.6%;  Score 22.4;  DB 1;  Length 25;
  Best Local Similarity   95.8%;  Pred. No. 60;
  Matches   23;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        232 AGGCTGTACCAGTGCAGGTCCTCA 255
              |||||||||||||||||||| |||||
Db          2 AGGCTGTACCAGTGCAGGACCTCA 25


RESULT 13
US-10-333-578-13/c
; Sequence 13, Application US/10333578
; Publication No. US20040058856A1
; GENERAL INFORMATION:
;  APPLICANT: CHOI, Soo-Young
;  APPLICANT:  HAN, Kyu-Hyung
;  APPLICANT:  PARK, Jinseu
;  APPLICANT:  KWON, Hyeok-Yil
;  APPLICANT:  KANG, Jung-Hoon
;  APPLICANT:  KANG, Tae-Chun
;  APPLICANT:  LEE, Kil-Soo
;  APPLICANT:  WON, Moo-Ho
;  TITLE OF INVENTION: Oligolysine transducing domain, oligolysine-cargo molecule
;  TITLE OF INVENTION:  complex and uses thereof
;  FILE REFERENCE: wjtj-shk-olygoK-us
;  CURRENT APPLICATION NUMBER: US/10/333,578
;  CURRENT FILING DATE:  2003-01-24
;  PRIOR APPLICATION NUMBER: KR10-2000-43022
;  PRIOR FILING DATE: 2000-07-26
;  PRIOR APPLICATION NUMBER: KR10-2001-6178
;  PRIOR FILING DATE: 2001-02-08
;  PRIOR APPLICATION NUMBER: KR10-2001-10981
;  PRIOR FILING DATE: 2001-03-03
;  PRIOR APPLICATION NUMBER: KR10-2001-14147
;  PRIOR FILING DATE: 2001-03-19
;  PRIOR APPLICATION NUMBER: PCT/KR01/00835
;  PRIOR FILING DATE: 2001-11-26
;  NUMBER OF SEQ ID NOS: 13
;  SOFTWARE: KopatentIn 1.71
; SEQ ID NO 13
;   LENGTH: 27
;   TYPE: DNA
;   ORGANISM: Homo sapiens
US-10-333-578-13

  Query Match             2.5%;  Score 22.2;  DB 1;  Length 27;
  Best Local Similarity   88.9%;  Pred. No. 66;
  Matches   24;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        509 GTAATTGGGATCGCCCAATAAACATTC 535
                ||||||||||||||||||||  || |
Db         27 GTAATTGGGATCGCCCAATAAGGATCC 1


RESULT 14
US-10-333-578-12
; Sequence 12, Application US/10333578
; Publication No. US20040058856A1
; GENERAL INFORMATION:
;  APPLICANT: CHOI, Soo-Young
;  APPLICANT:  HAN, Kyu-Hyung
;  APPLICANT:  PARK, Jinseu
;  APPLICANT:  KWON, Hyeok-Yil
;  APPLICANT:  KANG, Jung-Hoon
;  APPLICANT:  KANG, Tae-Chun
;  APPLICANT:  LEE, Kil-Soo
;  APPLICANT:  WON, Moo-Ho
;  TITLE OF INVENTION: Oligolysine transducing domain, oligolysine-cargo molecule
;  TITLE OF INVENTION:  complex and uses thereof
;  FILE REFERENCE: wjtj-shk-olygoK-us
;  CURRENT APPLICATION NUMBER: US/10/333,578
;  CURRENT FILING DATE:  2003-01-24
;  PRIOR APPLICATION NUMBER: KR10-2000-43022
;  PRIOR FILING DATE: 2000-07-26
;  PRIOR APPLICATION NUMBER: KR10-2001-6178
;  PRIOR FILING DATE: 2001-02-08
;  PRIOR APPLICATION NUMBER: KR10-2001-10981
;  PRIOR FILING DATE: 2001-03-03
;  PRIOR APPLICATION NUMBER: KR10-2001-14147
;  PRIOR FILING DATE: 2001-03-19
;  PRIOR APPLICATION NUMBER: PCT/KR01/00835
;  PRIOR FILING DATE: 2001-11-26
;  NUMBER OF SEQ ID NOS: 13
;  SOFTWARE: KopatentIn 1.71
; SEQ ID NO 12
;   LENGTH: 27
;   TYPE: DNA
;   ORGANISM: Homo sapiens
US-10-333-578-12

  Query Match             2.5%;  Score 22;  DB 1;  Length 27;
  Best Local Similarity   100.0%;  Pred. No. 68;
  Matches   22;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy         67 GGCGACGAAGGCCGTGTGCGTG 88
              ||||||||||||||||||||||
Db          6 GGCGACGAAGGCCGTGTGCGTG 27


RESULT 15
US-10-109-349A-52
; Sequence 52, Application US/10109349A
; Publication No. US20030186246A1
; GENERAL INFORMATION:
;  APPLICANT: Medical College of Ohio
;  APPLICANT:  Willey, James C.
;  APPLICANT:  Crawford, Erin L.
;  TITLE OF INVENTION: MULTIPLEX STANDARDIZED REVERSE TRANSCRIPTASE-POLYMERASE CHAIN REAC
;  TITLE OF INVENTION:  METHOD FOR ASSESSMENT OF GENE EXPRESSION IN SMALL BIOLOGICAL SAMI
;  FILE REFERENCE: 01154/2001-203
;  CURRENT APPLICATION NUMBER: US/10/109,349A
;  CURRENT FILING DATE:  2002-06-12
;  NUMBER OF SEQ ID NOS: 282
;  SOFTWARE: PatentIn version 3.1
; SEQ ID NO 52
;   LENGTH: 21
;   TYPE: DNA
;   ORGANISM: Homo sapiens
US-10-109-349A-52

  Query Match             2.4%;  Score 21;  DB 1;  Length 21;
  Best Local Similarity   100.0%;  Pred. No. 68;
  Matches   21;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;
```

```
Qy        153 TGAAGGTGTGGGGAAGCATTA 173
              |||||||||||||||||||||
Db          1 TGAAGGTGTGGGGAAGCATTA 21


RESULT 16
US-10-109-349A-53/c
; Sequence 53, Application US/10109349A
; Publication No. US20030186246A1
; GENERAL INFORMATION:
;  APPLICANT: Medical College of Ohio
;  APPLICANT:  Willey, James C.
;  APPLICANT:  Crawford, Erin L.
;  TITLE OF INVENTION: MULTIPLEX STANDARDIZED REVERSE TRANSCRIPTASE-POLYMERASE CHAIN REA
;  TITLE OF INVENTION:  METHOD FOR ASSESSMENT OF GENE EXPRESSION IN SMALL BIOLOGICAL SAM
;  FILE REFERENCE: 01154/2001-203
;  CURRENT APPLICATION NUMBER: US/10/109,349A
;  CURRENT FILING DATE:  2002-06-12
;  NUMBER OF SEQ ID NOS: 282
;  SOFTWARE: PatentIn version 3.1
; SEQ ID NO 53
;   LENGTH: 21
;   TYPE: DNA
;   ORGANISM: Homo sapiens
US-10-109-349A-53

  Query Match             2.4%;  Score 21;  DB 1;  Length 21;
  Best Local Similarity   100.0%;  Pred. No. 68;
  Matches   21;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        492 GTCGTTTGGCTTGTGGTGTAA 512
              |||||||||||||||||||||
Db         21 GTCGTTTGGCTTGTGGTGTAA 1


RESULT 17
US-10-633-843-6
; Sequence 6, Application US/10633843
; Publication No. US20040091919A1
; GENERAL INFORMATION:
;  APPLICANT: C. Frank Bennett
;  APPLICANT:  Kenneth Dobie
;  TITLE OF INVENTION: ANTISENSE MODULATION OF SUPEROXIDE DISMUTASE 1, SOLUBLE EXPRESSIO
;  FILE REFERENCE: ISPH-0756
;  CURRENT APPLICATION NUMBER: US/10/633,843
;  CURRENT FILING DATE:  2003-08-04
;  PRIOR APPLICATION NUMBER: US 09/888,360
;  PRIOR FILING DATE: 2001-06-21
;  NUMBER OF SEQ ID NOS: 90
; SEQ ID NO 6
;   LENGTH: 21
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: PCR Probe
US-10-633-843-6

  Query Match             2.4%;  Score 21;  DB 1;  Length 21;
  Best Local Similarity   100.0%;  Pred. No. 68;
  Matches   21;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy         71 ACGAAGGCCGTGTGCGTGCTG 91
              |||||||||||||||||||||
Db          1 ACGAAGGCCGTGTGCGTGCTG 21


RESULT 18
US-10-672-866-6
; Sequence 6, Application US/10672866
; Publication No. US20050019915A1
; GENERAL INFORMATION:
;  APPLICANT: C. Frank Bennett
;  APPLICANT:  Kenneth Dobie
;  TITLE OF INVENTION: ANTISENSE MODULATION OF SUPEROXIDE DISMUTASE 1,
;  TITLE OF INVENTION:  SOLUBLE
;  TITLE OF INVENTION:  EXPRESSION
;  FILE REFERENCE: RTS-0242
;  CURRENT APPLICATION NUMBER: US/10/672,866
;  CURRENT FILING DATE:  2003-09-26
;  PRIOR APPLICATION NUMBER: 10/633,843
;  PRIOR FILING DATE: 2003-08-04
;  PRIOR APPLICATION NUMBER: 09/888,360
;  PRIOR FILING DATE: 2001-06-21
;  NUMBER OF SEQ ID NOS: 339
; SEQ ID NO 6
;   LENGTH: 21
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: PCR Probe
US-10-672-866-6

  Query Match             2.4%;  Score 21;  DB 1;  Length 21;
  Best Local Similarity   100.0%;  Pred. No. 68;
  Matches   21;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy         71 ACGAAGGCCGTGTGCGTGCTG 91
              |||||||||||||||||||||
Db          1 ACGAAGGCCGTGTGCGTGCTG 21


RESULT 19
US-10-719-900-826010
; Sequence 826010, Application US/10719900
; Publication No. US20050026164A1
; GENERAL INFORMATION:
;  APPLICANT: Xue Mei Zhou
;  TITLE OF INVENTION: Methods of Genetic Analysis of Mouse
;  FILE REFERENCE: 3528.1
;  CURRENT APPLICATION NUMBER: US/10/719,900
;  CURRENT FILING DATE:  2003-11-20
;  PRIOR APPLICATION NUMBER: 60/427,808
;  PRIOR FILING DATE: 2002 11 20
;  NUMBER OF SEQ ID NOS: 982914
;  SOFTWARE: Microarray Probe Sequence Listing Generator V 1.1
; SEQ ID NO 826010
;   LENGTH: 25
;   TYPE: DNA
;   ORGANISM: Mus musculus
US-10-719-900-826010

  Query Match             2.4%;  Score 21;  DB 1;  Length 25;
  Best Local Similarity   100.0%;  Pred. No. 77;
  Matches   21;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        373 TGTGATCTCACTCTCAGGAGA 393
              |||||||||||||||||||||
Db          4 TGTGATCTCACTCTCAGGAGA 24


RESULT 20
US-10-719-900-61537
; Sequence 61537, Application US/10719900
; Publication No. US20050026164A1
; GENERAL INFORMATION:
;  APPLICANT: Xue Mei Zhou
;  TITLE OF INVENTION: Methods of Genetic Analysis of Mouse
;  FILE REFERENCE: 3528.1
;  CURRENT APPLICATION NUMBER: US/10/719,900
;  CURRENT FILING DATE:  2003-11-20
;  PRIOR APPLICATION NUMBER: 60/427,808
;  PRIOR FILING DATE: 2002 11 20
;  NUMBER OF SEQ ID NOS: 982914
;  SOFTWARE: Microarray Probe Sequence Listing Generator V 1.1
; SEQ ID NO 61537
```

```
;   LENGTH: 25
;   TYPE: DNA
;   ORGANISM: Mus musculus
US-10-719-900-61537

  Query Match             2.4%;  Score 20.8;  DB 1;  Length 25;
  Best Local Similarity   91.7%;  Pred. No. 80;
  Matches   22;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        232 AGGCTGTACCAGTGCAGGTCCTCA 255
              |||||||||||| |||||| |||||
Db          2 AGGCTGTACCACTGCAGGACCTCA 25


RESULT 21
US-10-719-900-456063
; Sequence 456063, Application US/10719900
; Publication No. US20050026164A1
; GENERAL INFORMATION:
;  APPLICANT: Xue Mei Zhou
;  TITLE OF INVENTION: Methods of Genetic Analysis of Mouse
;  FILE REFERENCE: 3528.1
;  CURRENT APPLICATION NUMBER: US/10/719,900
;  CURRENT FILING DATE:  2003-11-20
;  PRIOR APPLICATION NUMBER: 60/427,808
;  PRIOR FILING DATE: 2002 11 20
;  NUMBER OF SEQ ID NOS: 982914
;  SOFTWARE: Microarray Probe Sequence Listing Generator V 1.1
; SEQ ID NO 456063
;   LENGTH: 25
;   TYPE: DNA
;   ORGANISM: Mus musculus
US-10-719-900-456063

  Query Match             2.3%;  Score 20.4;  DB 1;  Length 25;
  Best Local Similarity   95.5%;  Pred. No. 86;
  Matches   21;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        314 GACTTGGGCAATGTGACTGCTG 335
              ||| ||||||||||||||||||
Db          1 GACCTGGGCAATGTGACTGCTG 22


RESULT 22
US-10-719-900-284833
; Sequence 284833, Application US/10719900
; Publication No. US20050026164A1
; GENERAL INFORMATION:
;  APPLICANT: Xue Mei Zhou
;  TITLE OF INVENTION: Methods of Genetic Analysis of Mouse
;  FILE REFERENCE: 3528.1
;  CURRENT APPLICATION NUMBER: US/10/719,900
;  CURRENT FILING DATE:  2003-11-20
;  PRIOR APPLICATION NUMBER: 60/427,808
;  PRIOR FILING DATE: 2002 11 20
;  NUMBER OF SEQ ID NOS: 982914
;  SOFTWARE: Microarray Probe Sequence Listing Generator V 1.1
; SEQ ID NO 284833
;   LENGTH: 25
;   TYPE: DNA
;   ORGANISM: Mus musculus
US-10-719-900-284833

  Query Match             2.3%;  Score 20.2;  DB 1;  Length 25;
  Best Local Similarity   88.0%;  Pred. No. 89;
  Matches   22;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        512 ATTGGGATCGCCCAATAAACATTCC 536
              |||||||| || || ||||||||||
Db          1 ATTGGGATTGCGCAGTAAACATTCC 25


RESULT 23
US-10-719-900-458198
; Sequence 458198, Application US/10719900
; Publication No. US20050026164A1
; GENERAL INFORMATION:
;  APPLICANT: Xue Mei Zhou
;  TITLE OF INVENTION: Methods of Genetic Analysis of Mouse
;  FILE REFERENCE: 3528.1
;  CURRENT APPLICATION NUMBER: US/10/719,900
;  CURRENT FILING DATE:  2003-11-20
;  PRIOR APPLICATION NUMBER: 60/427,808
;  PRIOR FILING DATE: 2002 11 20
;  NUMBER OF SEQ ID NOS: 982914
;  SOFTWARE: Microarray Probe Sequence Listing Generator V 1.1
; SEQ ID NO 458198
;   LENGTH: 25
;   TYPE: DNA
;   ORGANISM: Mus musculus
US-10-719-900-458198

  Query Match             2.3%;  Score 20.2;  DB 1;  Length 25;
  Best Local Similarity   88.0%;  Pred. No. 89;
  Matches   22;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        341 GATGGTGTGGCCGATGTGTCTATTG 365
              || ||||||||| ||||||| ||||
Db          1 GACGGTGTGGCCAATGTGTCCATTG 25


RESULT 24
US-10-719-900-458199
; Sequence 458199, Application US/10719900
; Publication No. US20050026164A1
; GENERAL INFORMATION:
;  APPLICANT: Xue Mei Zhou
;  TITLE OF INVENTION: Methods of Genetic Analysis of Mouse
;  FILE REFERENCE: 3528.1
;  CURRENT APPLICATION NUMBER: US/10/719,900
;  CURRENT FILING DATE:  2003-11-20
;  PRIOR APPLICATION NUMBER: 60/427,808
;  PRIOR FILING DATE: 2002 11 20
;  NUMBER OF SEQ ID NOS: 982914
;  SOFTWARE: Microarray Probe Sequence Listing Generator V 1.1
; SEQ ID NO 458199
;   LENGTH: 25
;   TYPE: DNA
;   ORGANISM: Mus musculus
US-10-719-900-458199

  Query Match             2.3%;  Score 20.2;  DB 1;  Length 25;
  Best Local Similarity   88.0%;  Pred. No. 89;
  Matches   22;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy        341 GATGGTGTGGCCGATGTGTCTATTG 365
              || ||||||||| ||||||| ||||
Db          1 GACGGTGTGGCCTATGTGTCCATTG 25


RESULT 25
US-10-719-900-889725
; Sequence 889725, Application US/10719900
; Publication No. US20050026164A1
; GENERAL INFORMATION:
;  APPLICANT: Xue Mei Zhou
;  TITLE OF INVENTION: Methods of Genetic Analysis of Mouse
;  FILE REFERENCE: 3528.1
;  CURRENT APPLICATION NUMBER: US/10/719,900
;  CURRENT FILING DATE:  2003-11-20
;  PRIOR APPLICATION NUMBER: 60/427,808
;  PRIOR FILING DATE: 2002 11 20
;  NUMBER OF SEQ ID NOS: 982914
;  SOFTWARE: Microarray Probe Sequence Listing Generator V 1.1
; SEQ ID NO 889725
;   LENGTH: 25
```

```
;   TYPE: DNA
;   ORGANISM: Mus musculus
US-10-719-900-889725

  Query Match             2.3%;  Score 20.2;  DB 1;  Length 25;
  Best Local Similarity   88.0%;  Pred. No. 89;
  Matches   22;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy       514 TGGGATCGCCCAATAAACATTCCCT 538
             |||||| || || ||||||||||||
Db         1 TGGGATTGCGCACTAAACATTCCCT 25


RESULT 26
US-10-719-900-889726
; Sequence 889726, Application US/10719900
; Publication No. US20050026164A1
; GENERAL INFORMATION:
;  APPLICANT: Xue Mei Zhou
;  TITLE OF INVENTION: Methods of Genetic Analysis of Mouse
;  FILE REFERENCE: 3528.1
;  CURRENT APPLICATION NUMBER: US/10/719,900
;  CURRENT FILING DATE:  2003-11-20
;  PRIOR APPLICATION NUMBER: 60/427,808
;  PRIOR FILING DATE: 2002 11 20
;  NUMBER OF SEQ ID NOS: 982914
;  SOFTWARE: Microarray Probe Sequence Listing Generator V 1.1
; SEQ ID NO 889726
;   LENGTH: 25
;   TYPE: DNA
;   ORGANISM: Mus musculus
US-10-719-900-889726

  Query Match             2.3%;  Score 20.2;  DB 1;  Length 25;
  Best Local Similarity   88.0%;  Pred. No. 89;
  Matches   22;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy       514 TGGGATCGCCCAATAAACATTCCCT 538
             |||||| || || ||||||||||||
Db         1 TGGGATTGCGCAGTAAACATTCCCT 25


RESULT 27
US-10-719-900-893797
; Sequence 893797, Application US/10719900
; Publication No. US20050026164A1
; GENERAL INFORMATION:
;  APPLICANT: Xue Mei Zhou
;  TITLE OF INVENTION: Methods of Genetic Analysis of Mouse
;  FILE REFERENCE: 3528.1
;  CURRENT APPLICATION NUMBER: US/10/719,900
;  CURRENT FILING DATE:  2003-11-20
;  PRIOR APPLICATION NUMBER: 60/427,808
;  PRIOR FILING DATE: 2002 11 20
;  NUMBER OF SEQ ID NOS: 982914
;  SOFTWARE: Microarray Probe Sequence Listing Generator V 1.1
; SEQ ID NO 893797
;   LENGTH: 25
;   TYPE: DNA
;   ORGANISM: Mus musculus
US-10-719-900-893797

  Query Match             2.3%;  Score 20.2;  DB 1;  Length 25;
  Best Local Similarity   88.0%;  Pred. No. 89;
  Matches   22;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy       420 TGGTCCATGAAAAAGCAGATGACTT 444
             |||||||||| ||| |||||||||
Db         1 TGGTCCATGAGAAACAAGATGACTT 25


RESULT 28
US-10-719-900-967669/c
; Sequence 967669, Application US/10719900
; Publication No. US20050026164A1
; GENERAL INFORMATION:
;  APPLICANT: Xue Mei Zhou
;  TITLE OF INVENTION: Methods of Genetic Analysis of Mouse
;  FILE REFERENCE: 3528.1
;  CURRENT APPLICATION NUMBER: US/10/719,900
;  CURRENT FILING DATE:  2003-11-20
;  PRIOR APPLICATION NUMBER: 60/427,808
;  PRIOR FILING DATE: 2002 11 20
;  NUMBER OF SEQ ID NOS: 982914
;  SOFTWARE: Microarray Probe Sequence Listing Generator V 1.1
; SEQ ID NO 967669
;   LENGTH: 25
;   TYPE: DNA
;   ORGANISM: Mus musculus
US-10-719-900-967669

  Query Match             2.3%;  Score 20.2;  DB 1;  Length 25;
  Best Local Similarity   88.0%;  Pred. No. 89;
  Matches   22;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy       315 ACTTGGGCAATGTGACTGCTGACAA 339
             || ||||||||||||||||||  ||
Db        25 ACCTGGGCAATGTGACTGCTGGAAA 1


RESULT 29
US-10-633-843-4
; Sequence 4, Application US/10633843
; Publication No. US20040091919A1
; GENERAL INFORMATION:
;  APPLICANT: C. Frank Bennett
;  APPLICANT:  Kenneth Dobie
;  TITLE OF INVENTION: ANTISENSE MODULATION OF SUPEROXIDE DISMUTASE 1, SOLUBLE EXPRESSION
;  FILE REFERENCE: ISPH-0756
;  CURRENT APPLICATION NUMBER: US/10/633,843
;  CURRENT FILING DATE:  2003-08-04
;  PRIOR APPLICATION NUMBER: US 09/888,360
;  PRIOR FILING DATE: 2001-06-21
;  NUMBER OF SEQ ID NOS: 90
; SEQ ID NO 4
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: PCR Primer
US-10-633-843-4

  Query Match             2.3%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 79;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        49 CGTGGCCTAGCGAGTTATGG 68
             ||||||||||||||||||||
Db         1 CGTGGCCTAGCGAGTTATGG 20


RESULT 30
US-10-633-843-5/c
; Sequence 5, Application US/10633843
; Publication No. US20040091919A1
; GENERAL INFORMATION:
;  APPLICANT: C. Frank Bennett
;  APPLICANT:  Kenneth Dobie
;  TITLE OF INVENTION: ANTISENSE MODULATION OF SUPEROXIDE DISMUTASE 1, SOLUBLE EXPRESSIO
;  FILE REFERENCE: ISPH-0756
;  CURRENT APPLICATION NUMBER: US/10/633,843
;  CURRENT FILING DATE:  2003-08-04
;  PRIOR APPLICATION NUMBER: US 09/888,360
;  PRIOR FILING DATE: 2001-06-21
;  NUMBER OF SEQ ID NOS: 90
; SEQ ID NO 5
```

```
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: PCR Primer
US-10-633-843-5

  Query Match             2.3%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 79;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        108 TGCAGGGCATCATCAATTTC 127
              ||||||||||||||||||||
Db         20 TGCAGGGCATCATCAATTTC 1


RESULT 31
US-10-633-843-13/c
; Sequence 13, Application US/10633843
; Publication No. US20040091919A1
; GENERAL INFORMATION:
;  APPLICANT: C. Frank Bennett
;  APPLICANT:  Kenneth Dobie
;  TITLE OF INVENTION: ANTISENSE MODULATION OF SUPEROXIDE DISMUTASE 1, SOLUBLE EXPRESSIC
;  FILE REFERENCE: ISPH-0756
;  CURRENT APPLICATION NUMBER: US/10/633,843
;  CURRENT FILING DATE:  2003-08-04
;  PRIOR APPLICATION NUMBER: US 09/888,360
;  PRIOR FILING DATE: 2001-06-21
;  NUMBER OF SEQ ID NOS: 90
; SEQ ID NO 13
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Antisense Oligonucleotide
US-10-633-843-13

  Query Match             2.3%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 79;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy         73 GAAGGCCGTGTGCGTGCTGA 92
              ||||||||||||||||||||
Db         20 GAAGGCCGTGTGCGTGCTGA 1


RESULT 32
US-10-633-843-14/c
; Sequence 14, Application US/10633843
; Publication No. US20040091919A1
; GENERAL INFORMATION:
;  APPLICANT: C. Frank Bennett
;  APPLICANT:  Kenneth Dobie
;  TITLE OF INVENTION: ANTISENSE MODULATION OF SUPEROXIDE DISMUTASE 1, SOLUBLE EXPRESSIC
;  FILE REFERENCE: ISPH-0756
;  CURRENT APPLICATION NUMBER: US/10/633,843
;  CURRENT FILING DATE:  2003-08-04
;  PRIOR APPLICATION NUMBER: US 09/888,360
;  PRIOR FILING DATE: 2001-06-21
;  NUMBER OF SEQ ID NOS: 90
; SEQ ID NO 14
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Antisense Oligonucleotide
US-10-633-843-14

  Query Match             2.3%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 79;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy         78 CCGTGTGCGTGCTGAAGGGC 97
              ||||||||||||||||||||
Db         20 CCGTGTGCGTGCTGAAGGGC 1


RESULT 33
US-10-633-843-15/c
; Sequence 15, Application US/10633843
; Publication No. US20040091919A1
; GENERAL INFORMATION:
;  APPLICANT: C. Frank Bennett
;  APPLICANT:  Kenneth Dobie
;  TITLE OF INVENTION: ANTISENSE MODULATION OF SUPEROXIDE DISMUTASE 1, SOLUBLE EXPRESSIOI
;  FILE REFERENCE: ISPH-0756
;  CURRENT APPLICATION NUMBER: US/10/633,843
;  CURRENT FILING DATE:  2003-08-04
;  PRIOR APPLICATION NUMBER: US 09/888,360
;  PRIOR FILING DATE: 2001-06-21
;  NUMBER OF SEQ ID NOS: 90
; SEQ ID NO 15
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Antisense Oligonucleotide
US-10-633-843-15

  Query Match             2.3%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 79;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy         81 TGTGCGTGCTGAAGGGCGAC 100
              ||||||||||||||||||||
Db         20 TGTGCGTGCTGAAGGGCGAC 1


RESULT 34
US-10-633-843-16/c
; Sequence 16, Application US/10633843
; Publication No. US20040091919A1
; GENERAL INFORMATION:
;  APPLICANT: C. Frank Bennett
;  APPLICANT:  Kenneth Dobie
;  TITLE OF INVENTION: ANTISENSE MODULATION OF SUPEROXIDE DISMUTASE 1, SOLUBLE EXPRESSIOI
;  FILE REFERENCE: ISPH-0756
;  CURRENT APPLICATION NUMBER: US/10/633,843
;  CURRENT FILING DATE:  2003-08-04
;  PRIOR APPLICATION NUMBER: US 09/888,360
;  PRIOR FILING DATE: 2001-06-21
;  NUMBER OF SEQ ID NOS: 90
; SEQ ID NO 16
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Antisense Oligonucleotide
US-10-633-843-16

  Query Match             2.3%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 79;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy         14 GGTTTCCGTTGCAGTCCTCG 33
              ||||||||||||||||||||
Db         20 GGTTTCCGTTGCAGTCCTCG 1


RESULT 35
US-10-633-843-17/c
; Sequence 17, Application US/10633843
; Publication No. US20040091919A1
; GENERAL INFORMATION:
;  APPLICANT: C. Frank Bennett
```

```
;  APPLICANT:  Kenneth Dobie
;  TITLE OF INVENTION: ANTISENSE MODULATION OF SUPEROXIDE DISMUTASE 1, SOLUBLE EXPRESSIC
;  FILE REFERENCE: ISPH-0756
;  CURRENT APPLICATION NUMBER: US/10/633,843
;  CURRENT FILING DATE:  2003-08-04
;  PRIOR APPLICATION NUMBER: US 09/888,360
;  PRIOR FILING DATE: 2001-06-21
;  NUMBER OF SEQ ID NOS: 90
; SEQ ID NO 17
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Antisense Oligonucleotide
US-10-633-843-17

  Query Match             2.3%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 79;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy         19 CCGTTGCAGTCCTCGGAACC 38
              ||||||||||||||||||||
Db         20 CCGTTGCAGTCCTCGGAACC 1


RESULT 36
US-10-633-843-18/c
; Sequence 18, Application US/10633843
; Publication No. US20040091919A1
; GENERAL INFORMATION:
;  APPLICANT: C. Frank Bennett
;  APPLICANT:  Kenneth Dobie
;  TITLE OF INVENTION: ANTISENSE MODULATION OF SUPEROXIDE DISMUTASE 1, SOLUBLE EXPRESSIC
;  FILE REFERENCE: ISPH-0756
;  CURRENT APPLICATION NUMBER: US/10/633,843
;  CURRENT FILING DATE:  2003-08-04
;  PRIOR APPLICATION NUMBER: US 09/888,360
;  PRIOR FILING DATE: 2001-06-21
;  NUMBER OF SEQ ID NOS: 90
; SEQ ID NO 18
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Antisense Oligonucleotide
US-10-633-843-18

  Query Match             2.3%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 79;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy         23 TGCAGTCCTCGGAACCAGGA 42
              ||||||||||||||||||||
Db         20 TGCAGTCCTCGGAACCAGGA 1


RESULT 37
US-10-633-843-19/c
; Sequence 19, Application US/10633843
; Publication No. US20040091919A1
; GENERAL INFORMATION:
;  APPLICANT: C. Frank Bennett
;  APPLICANT:  Kenneth Dobie
;  TITLE OF INVENTION: ANTISENSE MODULATION OF SUPEROXIDE DISMUTASE 1, SOLUBLE EXPRESSIC
;  FILE REFERENCE: ISPH-0756
;  CURRENT APPLICATION NUMBER: US/10/633,843
;  CURRENT FILING DATE:  2003-08-04
;  PRIOR APPLICATION NUMBER: US 09/888,360
;  PRIOR FILING DATE: 2001-06-21
;  NUMBER OF SEQ ID NOS: 90
; SEQ ID NO 19
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Antisense Oligonucleotide
US-10-633-843-19

  Query Match             2.3%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 79;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy         27 GTCCTCGGAACCAGGACCTC 46
              ||||||||||||||||||||
Db         20 GTCCTCGGAACCAGGACCTC 1


RESULT 38
US-10-633-843-20/c
; Sequence 20, Application US/10633843
; Publication No. US20040091919A1
; GENERAL INFORMATION:
;  APPLICANT: C. Frank Bennett
;  APPLICANT:  Kenneth Dobie
;  TITLE OF INVENTION: ANTISENSE MODULATION OF SUPEROXIDE DISMUTASE 1, SOLUBLE EXPRESSIO
;  FILE REFERENCE: ISPH-0756
;  CURRENT APPLICATION NUMBER: US/10/633,843
;  CURRENT FILING DATE:  2003-08-04
;  PRIOR APPLICATION NUMBER: US 09/888,360
;  PRIOR FILING DATE: 2001-06-21
;  NUMBER OF SEQ ID NOS: 90
; SEQ ID NO 20
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Antisense Oligonucleotide
US-10-633-843-20

  Query Match             2.3%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 79;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy         38 CAGGACCTCGGCGTGGCCTA 57
              ||||||||||||||||||||
Db         20 CAGGACCTCGGCGTGGCCTA 1


RESULT 39
US-10-633-843-21/c
; Sequence 21, Application US/10633843
; Publication No. US20040091919A1
; GENERAL INFORMATION:
;  APPLICANT: C. Frank Bennett
;  APPLICANT:  Kenneth Dobie
;  TITLE OF INVENTION: ANTISENSE MODULATION OF SUPEROXIDE DISMUTASE 1, SOLUBLE EXPRESSIO
;  FILE REFERENCE: ISPH-0756
;  CURRENT APPLICATION NUMBER: US/10/633,843
;  CURRENT FILING DATE:  2003-08-04
;  PRIOR APPLICATION NUMBER: US 09/888,360
;  PRIOR FILING DATE: 2001-06-21
;  NUMBER OF SEQ ID NOS: 90
; SEQ ID NO 21
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Antisense Oligonucleotide
US-10-633-843-21

  Query Match             2.3%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 79;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy         53 GCCTAGCGAGTTATGGCGAC 72
              ||||||||||||||||||||
```

```
Db         20 GCCTAGCGAGTTATGGCGAC 1


RESULT 40
US-10-633-843-22/c
; Sequence 22, Application US/10633843
; Publication No. US20040091919A1
; GENERAL INFORMATION:
;  APPLICANT: C. Frank Bennett
;  APPLICANT:  Kenneth Dobie
;  TITLE OF INVENTION: ANTISENSE MODULATION OF SUPEROXIDE DISMUTASE 1, SOLUBLE EXPRESSIO
;  FILE REFERENCE: ISPH-0756
;  CURRENT APPLICATION NUMBER: US/10/633,843
;  CURRENT FILING DATE:  2003-08-04
;  PRIOR APPLICATION NUMBER: US 09/888,360
;  PRIOR FILING DATE: 2001-06-21
;  NUMBER OF SEQ ID NOS: 90
; SEQ ID NO 22
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Antisense Oligonucleotide
US-10-633-843-22

  Query Match             2.3%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 79;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy         96 GCGACGGCCCAGTGCAGGGC 115
               ||||||||||||||||||||
Db         20 GCGACGGCCCAGTGCAGGGC 1


RESULT 41
US-10-633-843-23/c
; Sequence 23, Application US/10633843
; Publication No. US20040091919A1
; GENERAL INFORMATION:
;  APPLICANT: C. Frank Bennett
;  APPLICANT:  Kenneth Dobie
;  TITLE OF INVENTION: ANTISENSE MODULATION OF SUPEROXIDE DISMUTASE 1, SOLUBLE EXPRESSIO
;  FILE REFERENCE: ISPH-0756
;  CURRENT APPLICATION NUMBER: US/10/633,843
;  CURRENT FILING DATE:  2003-08-04
;  PRIOR APPLICATION NUMBER: US 09/888,360
;  PRIOR FILING DATE: 2001-06-21
;  NUMBER OF SEQ ID NOS: 90
; SEQ ID NO 23
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Antisense Oligonucleotide
US-10-633-843-23

  Query Match             2.3%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 79;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        106 AGTGCAGGGCATCATCAATT 125
              ||||||||||||||||||||
Db         20 AGTGCAGGGCATCATCAATT 1


RESULT 42
US-10-633-843-24/c
; Sequence 24, Application US/10633843
; Publication No. US20040091919A1
; GENERAL INFORMATION:
;  APPLICANT: C. Frank Bennett
;  APPLICANT:  Kenneth Dobie
;  TITLE OF INVENTION: ANTISENSE MODULATION OF SUPEROXIDE DISMUTASE 1, SOLUBLE EXPRESSIO
;  FILE REFERENCE: ISPH-0756
;  CURRENT APPLICATION NUMBER: US/10/633,843
;  CURRENT FILING DATE:  2003-08-04
;  PRIOR APPLICATION NUMBER: US 09/888,360
;  PRIOR FILING DATE: 2001-06-21
;  NUMBER OF SEQ ID NOS: 90
; SEQ ID NO 24
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Antisense Oligonucleotide
US-10-633-843-24

  Query Match             2.3%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 79;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        135 AGGAAAGTAATGGACCAGTG 154
              ||||||||||||||||||||
Db         20 AGGAAAGTAATGGACCAGTG 1


RESULT 43
US-10-633-843-25/c
; Sequence 25, Application US/10633843
; Publication No. US20040091919A1
; GENERAL INFORMATION:
;  APPLICANT: C. Frank Bennett
;  APPLICANT:  Kenneth Dobie
;  TITLE OF INVENTION: ANTISENSE MODULATION OF SUPEROXIDE DISMUTASE 1, SOLUBLE EXPRESSIOI
;  FILE REFERENCE: ISPH-0756
;  CURRENT APPLICATION NUMBER: US/10/633,843
;  CURRENT FILING DATE:  2003-08-04
;  PRIOR APPLICATION NUMBER: US 09/888,360
;  PRIOR FILING DATE: 2001-06-21
;  NUMBER OF SEQ ID NOS: 90
; SEQ ID NO 25
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Antisense Oligonucleotide
US-10-633-843-25

  Query Match             2.3%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 79;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        142 TAATGGACCAGTGAAGGTGT 161
              ||||||||||||||||||||
Db         20 TAATGGACCAGTGAAGGTGT 1


RESULT 44
US-10-633-843-26/c
; Sequence 26, Application US/10633843
; Publication No. US20040091919A1
; GENERAL INFORMATION:
;  APPLICANT: C. Frank Bennett
;  APPLICANT:  Kenneth Dobie
;  TITLE OF INVENTION: ANTISENSE MODULATION OF SUPEROXIDE DISMUTASE 1, SOLUBLE EXPRESSIOI
;  FILE REFERENCE: ISPH-0756
;  CURRENT APPLICATION NUMBER: US/10/633,843
;  CURRENT FILING DATE:  2003-08-04
;  PRIOR APPLICATION NUMBER: US 09/888,360
;  PRIOR FILING DATE: 2001-06-21
;  NUMBER OF SEQ ID NOS: 90
; SEQ ID NO 26
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
```

```
;   OTHER INFORMATION: Antisense Oligonucleotide
US-10-633-843-26

  Query Match             2.3%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 79;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        144 ATGGACCAGTGAAGGTGTGG 163
              ||||||||||||||||||||
Db         20 ATGGACCAGTGAAGGTGTGG 1


RESULT 45
US-10-633-843-27/c
; Sequence 27, Application US/10633843
; Publication No. US20040091919A1
; GENERAL INFORMATION:
;  APPLICANT: C. Frank Bennett
;  APPLICANT:  Kenneth Dobie
;  TITLE OF INVENTION: ANTISENSE MODULATION OF SUPEROXIDE DISMUTASE 1, SOLUBLE EXPRESSIO
;  FILE REFERENCE: ISPH-0756
;  CURRENT APPLICATION NUMBER: US/10/633,843
;  CURRENT FILING DATE:  2003-08-04
;  PRIOR APPLICATION NUMBER: US 09/888,360
;  PRIOR FILING DATE: 2001-06-21
;  NUMBER OF SEQ ID NOS: 90
; SEQ ID NO 27
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Antisense Oligonucleotide
US-10-633-843-27

  Query Match             2.3%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 79;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        161 TGGGGAAGCATTAAAGGACT 180
              ||||||||||||||||||||
Db         20 TGGGGAAGCATTAAAGGACT 1


RESULT 46
US-10-633-843-28/c
; Sequence 28, Application US/10633843
; Publication No. US20040091919A1
; GENERAL INFORMATION:
;  APPLICANT: C. Frank Bennett
;  APPLICANT:  Kenneth Dobie
;  TITLE OF INVENTION: ANTISENSE MODULATION OF SUPEROXIDE DISMUTASE 1, SOLUBLE EXPRESSIO
;  FILE REFERENCE: ISPH-0756
;  CURRENT APPLICATION NUMBER: US/10/633,843
;  CURRENT FILING DATE:  2003-08-04
;  PRIOR APPLICATION NUMBER: US 09/888,360
;  PRIOR FILING DATE: 2001-06-21
;  NUMBER OF SEQ ID NOS: 90
; SEQ ID NO 28
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Antisense Oligonucleotide
US-10-633-843-28

  Query Match             2.3%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 79;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        173 AAAGGACTGACTGAAGGCCT 192
              ||||||||||||||||||||
Db         20 AAAGGACTGACTGAAGGCCT 1


RESULT 47
US-10-633-843-29/c
; Sequence 29, Application US/10633843
; Publication No. US20040091919A1
; GENERAL INFORMATION:
;  APPLICANT: C. Frank Bennett
;  APPLICANT:  Kenneth Dobie
;  TITLE OF INVENTION: ANTISENSE MODULATION OF SUPEROXIDE DISMUTASE 1, SOLUBLE EXPRESSIO
;  FILE REFERENCE: ISPH-0756
;  CURRENT APPLICATION NUMBER: US/10/633,843
;  CURRENT FILING DATE:  2003-08-04
;  PRIOR APPLICATION NUMBER: US 09/888,360
;  PRIOR FILING DATE: 2001-06-21
;  NUMBER OF SEQ ID NOS: 90
; SEQ ID NO 29
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Antisense Oligonucleotide
US-10-633-843-29

  Query Match             2.3%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 79;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        174 AAGGACTGACTGAAGGCCTG 193
              ||||||||||||||||||||
Db         20 AAGGACTGACTGAAGGCCTG 1


RESULT 48
US-10-633-843-30/c
; Sequence 30, Application US/10633843
; Publication No. US20040091919A1
; GENERAL INFORMATION:
;  APPLICANT: C. Frank Bennett
;  APPLICANT:  Kenneth Dobie
;  TITLE OF INVENTION: ANTISENSE MODULATION OF SUPEROXIDE DISMUTASE 1, SOLUBLE EXPRESSIO
;  FILE REFERENCE: ISPH-0756
;  CURRENT APPLICATION NUMBER: US/10/633,843
;  CURRENT FILING DATE:  2003-08-04
;  PRIOR APPLICATION NUMBER: US 09/888,360
;  PRIOR FILING DATE: 2001-06-21
;  NUMBER OF SEQ ID NOS: 90
; SEQ ID NO 30
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Antisense Oligonucleotide
US-10-633-843-30

  Query Match             2.3%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 79;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        205 TGTTCATGAGTTTGGAGATA 224
              ||||||||||||||||||||
Db         20 TGTTCATGAGTTTGGAGATA 1


RESULT 49
US-10-633-843-31/c
; Sequence 31, Application US/10633843
; Publication No. US20040091919A1
; GENERAL INFORMATION:
;  APPLICANT: C. Frank Bennett
;  APPLICANT:  Kenneth Dobie
;  TITLE OF INVENTION: ANTISENSE MODULATION OF SUPEROXIDE DISMUTASE 1, SOLUBLE EXPRESSIO
;  FILE REFERENCE: ISPH-0756
;  CURRENT APPLICATION NUMBER: US/10/633,843
```

```
;  CURRENT FILING DATE:  2003-08-04
;  PRIOR APPLICATION NUMBER: US 09/888,360
;  PRIOR FILING DATE: 2001-06-21
;  NUMBER OF SEQ ID NOS: 90
; SEQ ID NO 31
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Antisense Oligonucleotide
US-10-633-843-31

  Query Match             2.3%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 79;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        212 GAGTTTGGAGATAATACAGC 231
              ||||||||||||||||||||
Db         20 GAGTTTGGAGATAATACAGC 1


RESULT 50
US-10-633-843-32/c
; Sequence 32, Application US/10633843
; Publication No. US20040091919A1
; GENERAL INFORMATION:
;  APPLICANT: C. Frank Bennett
;  APPLICANT:  Kenneth Dobie
;  TITLE OF INVENTION: ANTISENSE MODULATION OF SUPEROXIDE DISMUTASE 1, SOLUBLE EXPRESSIO
;  FILE REFERENCE: ISPH-0756
;  CURRENT APPLICATION NUMBER: US/10/633,843
;  CURRENT FILING DATE:  2003-08-04
;  PRIOR APPLICATION NUMBER: US 09/888,360
;  PRIOR FILING DATE: 2001-06-21
;  NUMBER OF SEQ ID NOS: 90
; SEQ ID NO 32
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Antisense Oligonucleotide
US-10-633-843-32

  Query Match             2.3%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 79;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        221 GATAATACAGCAGGCTGTAC 240
              ||||||||||||||||||||
Db         20 GATAATACAGCAGGCTGTAC 1


RESULT 51
US-10-633-843-33/c
; Sequence 33, Application US/10633843
; Publication No. US20040091919A1
; GENERAL INFORMATION:
;  APPLICANT: C. Frank Bennett
;  APPLICANT:  Kenneth Dobie
;  TITLE OF INVENTION: ANTISENSE MODULATION OF SUPEROXIDE DISMUTASE 1, SOLUBLE EXPRESSIO
;  FILE REFERENCE: ISPH-0756
;  CURRENT APPLICATION NUMBER: US/10/633,843
;  CURRENT FILING DATE:  2003-08-04
;  PRIOR APPLICATION NUMBER: US 09/888,360
;  PRIOR FILING DATE: 2001-06-21
;  NUMBER OF SEQ ID NOS: 90
; SEQ ID NO 33
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Antisense Oligonucleotide
US-10-633-843-33

  Query Match             2.3%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 79;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        304 GCATGTTGGAGACTTGGGCA 323
              ||||||||||||||||||||
Db         20 GCATGTTGGAGACTTGGGCA 1


RESULT 52
US-10-633-843-34/c
; Sequence 34, Application US/10633843
; Publication No. US20040091919A1
; GENERAL INFORMATION:
;  APPLICANT: C. Frank Bennett
;  APPLICANT:  Kenneth Dobie
;  TITLE OF INVENTION: ANTISENSE MODULATION OF SUPEROXIDE DISMUTASE 1, SOLUBLE EXPRESSIO
;  FILE REFERENCE: ISPH-0756
;  CURRENT APPLICATION NUMBER: US/10/633,843
;  CURRENT FILING DATE:  2003-08-04
;  PRIOR APPLICATION NUMBER: US 09/888,360
;  PRIOR FILING DATE: 2001-06-21
;  NUMBER OF SEQ ID NOS: 90
; SEQ ID NO 34
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Antisense Oligonucleotide
US-10-633-843-34

  Query Match             2.3%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 79;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        309 TTGGAGACTTGGGCAATGTG 328
              ||||||||||||||||||||
Db         20 TTGGAGACTTGGGCAATGTG 1


RESULT 53
US-10-633-843-35/c
; Sequence 35, Application US/10633843
; Publication No. US20040091919A1
; GENERAL INFORMATION:
;  APPLICANT: C. Frank Bennett
;  APPLICANT:  Kenneth Dobie
;  TITLE OF INVENTION: ANTISENSE MODULATION OF SUPEROXIDE DISMUTASE 1, SOLUBLE EXPRESSIO
;  FILE REFERENCE: ISPH-0756
;  CURRENT APPLICATION NUMBER: US/10/633,843
;  CURRENT FILING DATE:  2003-08-04
;  PRIOR APPLICATION NUMBER: US 09/888,360
;  PRIOR FILING DATE: 2001-06-21
;  NUMBER OF SEQ ID NOS: 90
; SEQ ID NO 35
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Antisense Oligonucleotide
US-10-633-843-35

  Query Match             2.3%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 79;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        335 GACAAAGATGGTGTGGCCGA 354
              ||||||||||||||||||||
Db         20 GACAAAGATGGTGTGGCCGA 1


RESULT 54
```

```
US-10-633-843-36/c
; Sequence 36, Application US/10633843
; Publication No. US20040091919A1
; GENERAL INFORMATION:
;  APPLICANT: C. Frank Bennett
;  APPLICANT:  Kenneth Dobie
;  TITLE OF INVENTION: ANTISENSE MODULATION OF SUPEROXIDE DISMUTASE 1, SOLUBLE EXPRESSIO
;  FILE REFERENCE: ISPH-0756
;  CURRENT APPLICATION NUMBER: US/10/633,843
;  CURRENT FILING DATE:  2003-08-04
;  PRIOR APPLICATION NUMBER: US 09/888,360
;  PRIOR FILING DATE: 2001-06-21
;  NUMBER OF SEQ ID NOS: 90
; SEQ ID NO 36
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Antisense Oligonucleotide
US-10-633-843-36

  Query Match             2.3%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 79;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        337 CAAAGATGGTGTGGCCGATG 356
              ||||||||||||||||||||
Db         20 CAAAGATGGTGTGGCCGATG 1


RESULT 55
US-10-633-843-37/c
; Sequence 37, Application US/10633843
; Publication No. US20040091919A1
; GENERAL INFORMATION:
;  APPLICANT: C. Frank Bennett
;  APPLICANT:  Kenneth Dobie
;  TITLE OF INVENTION: ANTISENSE MODULATION OF SUPEROXIDE DISMUTASE 1, SOLUBLE EXPRESSIO
;  FILE REFERENCE: ISPH-0756
;  CURRENT APPLICATION NUMBER: US/10/633,843
;  CURRENT FILING DATE:  2003-08-04
;  PRIOR APPLICATION NUMBER: US 09/888,360
;  PRIOR FILING DATE: 2001-06-21
;  NUMBER OF SEQ ID NOS: 90
; SEQ ID NO 37
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Antisense Oligonucleotide
US-10-633-843-37

  Query Match             2.3%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 79;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        340 AGATGGTGTGGCCGATGTGT 359
              ||||||||||||||||||||
Db         20 AGATGGTGTGGCCGATGTGT 1


RESULT 56
US-10-633-843-38/c
; Sequence 38, Application US/10633843
; Publication No. US20040091919A1
; GENERAL INFORMATION:
;  APPLICANT: C. Frank Bennett
;  APPLICANT:  Kenneth Dobie
;  TITLE OF INVENTION: ANTISENSE MODULATION OF SUPEROXIDE DISMUTASE 1, SOLUBLE EXPRESSIO
;  FILE REFERENCE: ISPH-0756
;  CURRENT APPLICATION NUMBER: US/10/633,843
;  CURRENT FILING DATE:  2003-08-04
;  PRIOR APPLICATION NUMBER: US 09/888,360
;  PRIOR FILING DATE: 2001-06-21
;  NUMBER OF SEQ ID NOS: 90
; SEQ ID NO 38
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Antisense Oligonucleotide
US-10-633-843-38

  Query Match             2.3%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 79;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        343 TGGTGTGGCCGATGTGTCTA 362
              ||||||||||||||||||||
Db         20 TGGTGTGGCCGATGTGTCTA 1


RESULT 57
US-10-633-843-39/c
; Sequence 39, Application US/10633843
; Publication No. US20040091919A1
; GENERAL INFORMATION:
;  APPLICANT: C. Frank Bennett
;  APPLICANT:  Kenneth Dobie
;  TITLE OF INVENTION: ANTISENSE MODULATION OF SUPEROXIDE DISMUTASE 1, SOLUBLE EXPRESSIO
;  FILE REFERENCE: ISPH-0756
;  CURRENT APPLICATION NUMBER: US/10/633,843
;  CURRENT FILING DATE:  2003-08-04
;  PRIOR APPLICATION NUMBER: US 09/888,360
;  PRIOR FILING DATE: 2001-06-21
;  NUMBER OF SEQ ID NOS: 90
; SEQ ID NO 39
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Antisense Oligonucleotide
US-10-633-843-39

  Query Match             2.3%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 79;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        404 ATTGGCCGCACACTGGTGGT 423
              ||||||||||||||||||||
Db         20 ATTGGCCGCACACTGGTGGT 1


RESULT 58
US-10-633-843-40/c
; Sequence 40, Application US/10633843
; Publication No. US20040091919A1
; GENERAL INFORMATION:
;  APPLICANT: C. Frank Bennett
;  APPLICANT:  Kenneth Dobie
;  TITLE OF INVENTION: ANTISENSE MODULATION OF SUPEROXIDE DISMUTASE 1, SOLUBLE EXPRESSIO
;  FILE REFERENCE: ISPH-0756
;  CURRENT APPLICATION NUMBER: US/10/633,843
;  CURRENT FILING DATE:  2003-08-04
;  PRIOR APPLICATION NUMBER: US 09/888,360
;  PRIOR FILING DATE: 2001-06-21
;  NUMBER OF SEQ ID NOS: 90
; SEQ ID NO 40
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Antisense Oligonucleotide
US-10-633-843-40

  Query Match             2.3%;  Score 20;  DB 1;  Length 20;
```

```
  Best Local Similarity   100.0%;  Pred. No. 79;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        409 CCGCACACTGGTGGTCCATG 428
              ||||||||||||||||||||
Db         20 CCGCACACTGGTGGTCCATG 1


RESULT 59
US-10-633-843-41/c
; Sequence 41, Application US/10633843
; Publication No. US20040091919A1
; GENERAL INFORMATION:
;  APPLICANT: C. Frank Bennett
;  APPLICANT:  Kenneth Dobie
;  TITLE OF INVENTION: ANTISENSE MODULATION OF SUPEROXIDE DISMUTASE 1, SOLUBLE EXPRESSIC
;  FILE REFERENCE: ISPH-0756
;  CURRENT APPLICATION NUMBER: US/10/633,843
;  CURRENT FILING DATE:  2003-08-04
;  PRIOR APPLICATION NUMBER: US 09/888,360
;  PRIOR FILING DATE: 2001-06-21
;  NUMBER OF SEQ ID NOS: 90
; SEQ ID NO 41
;    LENGTH: 20
;    TYPE: DNA
;    ORGANISM: Artificial Sequence
;    FEATURE:
;    OTHER INFORMATION: Antisense Oligonucleotide
US-10-633-843-41

  Query Match             2.3%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 79;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        410 CGCACACTGGTGGTCCATGA 429
              ||||||||||||||||||||
Db         20 CGCACACTGGTGGTCCATGA 1


RESULT 60
US-10-633-843-42/c
; Sequence 42, Application US/10633843
; Publication No. US20040091919A1
; GENERAL INFORMATION:
;  APPLICANT: C. Frank Bennett
;  APPLICANT:  Kenneth Dobie
;  TITLE OF INVENTION: ANTISENSE MODULATION OF SUPEROXIDE DISMUTASE 1, SOLUBLE EXPRESSIC
;  FILE REFERENCE: ISPH-0756
;  CURRENT APPLICATION NUMBER: US/10/633,843
;  CURRENT FILING DATE:  2003-08-04
;  PRIOR APPLICATION NUMBER: US 09/888,360
;  PRIOR FILING DATE: 2001-06-21
;  NUMBER OF SEQ ID NOS: 90
; SEQ ID NO 42
;    LENGTH: 20
;    TYPE: DNA
;    ORGANISM: Artificial Sequence
;    FEATURE:
;    OTHER INFORMATION: Antisense Oligonucleotide
US-10-633-843-42

  Query Match             2.3%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 79;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        504 GTGGTGTAATTGGGATCGCC 523
              ||||||||||||||||||||
Db         20 GTGGTGTAATTGGGATCGCC 1


RESULT 61
US-10-633-843-43/c
; Sequence 43, Application US/10633843
; Publication No. US20040091919A1
; GENERAL INFORMATION:
;  APPLICANT: C. Frank Bennett
;  APPLICANT:  Kenneth Dobie
;  TITLE OF INVENTION: ANTISENSE MODULATION OF SUPEROXIDE DISMUTASE 1, SOLUBLE EXPRESSIOI
;  FILE REFERENCE: ISPH-0756
;  CURRENT APPLICATION NUMBER: US/10/633,843
;  CURRENT FILING DATE:  2003-08-04
;  PRIOR APPLICATION NUMBER: US 09/888,360
;  PRIOR FILING DATE: 2001-06-21
;  NUMBER OF SEQ ID NOS: 90
; SEQ ID NO 43
;    LENGTH: 20
;    TYPE: DNA
;    ORGANISM: Artificial Sequence
;    FEATURE:
;    OTHER INFORMATION: Antisense Oligonucleotide
US-10-633-843-43

  Query Match             2.3%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 79;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        517 GATCGCCCAATAAACATTCC 536
              ||||||||||||||||||||
Db         20 GATCGCCCAATAAACATTCC 1


RESULT 62
US-10-633-843-44/c
; Sequence 44, Application US/10633843
; Publication No. US20040091919A1
; GENERAL INFORMATION:
;  APPLICANT: C. Frank Bennett
;  APPLICANT:  Kenneth Dobie
;  TITLE OF INVENTION: ANTISENSE MODULATION OF SUPEROXIDE DISMUTASE 1, SOLUBLE EXPRESSIOI
;  FILE REFERENCE: ISPH-0756
;  CURRENT APPLICATION NUMBER: US/10/633,843
;  CURRENT FILING DATE:  2003-08-04
;  PRIOR APPLICATION NUMBER: US 09/888,360
;  PRIOR FILING DATE: 2001-06-21
;  NUMBER OF SEQ ID NOS: 90
; SEQ ID NO 44
;    LENGTH: 20
;    TYPE: DNA
;    ORGANISM: Artificial Sequence
;    FEATURE:
;    OTHER INFORMATION: Antisense Oligonucleotide
US-10-633-843-44

  Query Match             2.3%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 79;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        535 CCCTTGGATGTAGTCTGAGG 554
              ||||||||||||||||||||
Db         20 CCCTTGGATGTAGTCTGAGG 1


RESULT 63
US-10-633-843-45/c
; Sequence 45, Application US/10633843
; Publication No. US20040091919A1
; GENERAL INFORMATION:
;  APPLICANT: C. Frank Bennett
;  APPLICANT:  Kenneth Dobie
;  TITLE OF INVENTION: ANTISENSE MODULATION OF SUPEROXIDE DISMUTASE 1, SOLUBLE EXPRESSIOI
;  FILE REFERENCE: ISPH-0756
;  CURRENT APPLICATION NUMBER: US/10/633,843
;  CURRENT FILING DATE:  2003-08-04
;  PRIOR APPLICATION NUMBER: US 09/888,360
;  PRIOR FILING DATE: 2001-06-21
;  NUMBER OF SEQ ID NOS: 90
```

; SEQ ID NO 45
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-10-633-843-45

Query Match 2.3%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 79;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 556 CCCTTAACTCATCTGTTATC 575
||||||||||||||||||||
Db 20 CCCTTAACTCATCTGTTATC 1

RESULT 64
US-10-633-843-46/c
; Sequence 46, Application US/10633843
; Publication No. US20040091919A1
; GENERAL INFORMATION:
; APPLICANT: C. Frank Bennett
; APPLICANT: Kenneth Dobie
; TITLE OF INVENTION: ANTISENSE MODULATION OF SUPEROXIDE DISMUTASE 1, SOLUBLE EXPRESSIO
; FILE REFERENCE: ISPH-0756
; CURRENT APPLICATION NUMBER: US/10/633,843
; CURRENT FILING DATE: 2003-08-04
; PRIOR APPLICATION NUMBER: US 09/888,360
; PRIOR FILING DATE: 2001-06-21
; NUMBER OF SEQ ID NOS: 90
; SEQ ID NO 46
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-10-633-843-46

Query Match 2.3%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 79;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 620 ATCTTAAAAGTGTAATTGTG 639
||||||||||||||||||||
Db 20 ATCTTAAAAGTGTAATTGTG 1

RESULT 65
US-10-633-843-47/c
; Sequence 47, Application US/10633843
; Publication No. US20040091919A1
; GENERAL INFORMATION:
; APPLICANT: C. Frank Bennett
; APPLICANT: Kenneth Dobie
; TITLE OF INVENTION: ANTISENSE MODULATION OF SUPEROXIDE DISMUTASE 1, SOLUBLE EXPRESSIO
; FILE REFERENCE: ISPH-0756
; CURRENT APPLICATION NUMBER: US/10/633,843
; CURRENT FILING DATE: 2003-08-04
; PRIOR APPLICATION NUMBER: US 09/888,360
; PRIOR FILING DATE: 2001-06-21
; NUMBER OF SEQ ID NOS: 90
; SEQ ID NO 47
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-10-633-843-47

Query Match 2.3%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 79;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 625 AAAAGTGTAATTGTGTGACT 644
||||||||||||||||||||
Db 20 AAAAGTGTAATTGTGTGACT 1

RESULT 66
US-10-633-843-48/c
; Sequence 48, Application US/10633843
; Publication No. US20040091919A1
; GENERAL INFORMATION:
; APPLICANT: C. Frank Bennett
; APPLICANT: Kenneth Dobie
; TITLE OF INVENTION: ANTISENSE MODULATION OF SUPEROXIDE DISMUTASE 1, SOLUBLE EXPRESSION
; FILE REFERENCE: ISPH-0756
; CURRENT APPLICATION NUMBER: US/10/633,843
; CURRENT FILING DATE: 2003-08-04
; PRIOR APPLICATION NUMBER: US 09/888,360
; PRIOR FILING DATE: 2001-06-21
; NUMBER OF SEQ ID NOS: 90
; SEQ ID NO 48
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-10-633-843-48

Query Match 2.3%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 79;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 658 TTTAAAGTACCTGTAGTGAG 677
||||||||||||||||||||
Db 20 TTTAAAGTACCTGTAGTGAG 1

RESULT 67
US-10-633-843-49/c
; Sequence 49, Application US/10633843
; Publication No. US20040091919A1
; GENERAL INFORMATION:
; APPLICANT: C. Frank Bennett
; APPLICANT: Kenneth Dobie
; TITLE OF INVENTION: ANTISENSE MODULATION OF SUPEROXIDE DISMUTASE 1, SOLUBLE EXPRESSION
; FILE REFERENCE: ISPH-0756
; CURRENT APPLICATION NUMBER: US/10/633,843
; CURRENT FILING DATE: 2003-08-04
; PRIOR APPLICATION NUMBER: US 09/888,360
; PRIOR FILING DATE: 2001-06-21
; NUMBER OF SEQ ID NOS: 90
; SEQ ID NO 49
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-10-633-843-49

Query Match 2.3%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 79;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 667 CCTGTAGTGAGAAACTGATT 686
||||||||||||||||||||
Db 20 CCTGTAGTGAGAAACTGATT 1

RESULT 68
US-10-633-843-50/c
; Sequence 50, Application US/10633843
; Publication No. US20040091919A1
; GENERAL INFORMATION:

```
;  APPLICANT: C. Frank Bennett
;  APPLICANT:  Kenneth Dobie
;  TITLE OF INVENTION: ANTISENSE MODULATION OF SUPEROXIDE DISMUTASE 1, SOLUBLE EXPRESSIO
;  FILE REFERENCE: ISPH-0756
;  CURRENT APPLICATION NUMBER: US/10/633,843
;  CURRENT FILING DATE:  2003-08-04
;  PRIOR APPLICATION NUMBER: US 09/888,360
;  PRIOR FILING DATE: 2001-06-21
;  NUMBER OF SEQ ID NOS: 90
; SEQ ID NO 50
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Antisense Oligonucleotide
US-10-633-843-50

  Query Match             2.3%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 79;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        670 GTAGTGAGAAACTGATTTAT 689
              ||||||||||||||||||||
Db         20 GTAGTGAGAAACTGATTTAT 1


RESULT 69
US-10-633-843-51/c
; Sequence 51, Application US/10633843
; Publication No. US20040091919A1
; GENERAL INFORMATION:
;  APPLICANT: C. Frank Bennett
;  APPLICANT:  Kenneth Dobie
;  TITLE OF INVENTION: ANTISENSE MODULATION OF SUPEROXIDE DISMUTASE 1, SOLUBLE EXPRESSIO
;  FILE REFERENCE: ISPH-0756
;  CURRENT APPLICATION NUMBER: US/10/633,843
;  CURRENT FILING DATE:  2003-08-04
;  PRIOR APPLICATION NUMBER: US 09/888,360
;  PRIOR FILING DATE: 2001-06-21
;  NUMBER OF SEQ ID NOS: 90
; SEQ ID NO 51
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Antisense Oligonucleotide
US-10-633-843-51

  Query Match             2.3%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 79;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        671 TAGTGAGAAACTGATTTATG 690
              ||||||||||||||||||||
Db         20 TAGTGAGAAACTGATTTATG 1


RESULT 70
US-10-633-843-52/c
; Sequence 52, Application US/10633843
; Publication No. US20040091919A1
; GENERAL INFORMATION:
;  APPLICANT: C. Frank Bennett
;  APPLICANT:  Kenneth Dobie
;  TITLE OF INVENTION: ANTISENSE MODULATION OF SUPEROXIDE DISMUTASE 1, SOLUBLE EXPRESSIO
;  FILE REFERENCE: ISPH-0756
;  CURRENT APPLICATION NUMBER: US/10/633,843
;  CURRENT FILING DATE:  2003-08-04
;  PRIOR APPLICATION NUMBER: US 09/888,360
;  PRIOR FILING DATE: 2001-06-21
;  NUMBER OF SEQ ID NOS: 90
; SEQ ID NO 52
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Antisense Oligonucleotide
US-10-633-843-52

  Query Match             2.3%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 79;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        686 TTATGATCACTTGGAAGATT 705
              ||||||||||||||||||||
Db         20 TTATGATCACTTGGAAGATT 1


RESULT 71
US-10-633-843-53/c
; Sequence 53, Application US/10633843
; Publication No. US20040091919A1
; GENERAL INFORMATION:
;  APPLICANT: C. Frank Bennett
;  APPLICANT:  Kenneth Dobie
;  TITLE OF INVENTION: ANTISENSE MODULATION OF SUPEROXIDE DISMUTASE 1, SOLUBLE EXPRESSIO
;  FILE REFERENCE: ISPH-0756
;  CURRENT APPLICATION NUMBER: US/10/633,843
;  CURRENT FILING DATE:  2003-08-04
;  PRIOR APPLICATION NUMBER: US 09/888,360
;  PRIOR FILING DATE: 2001-06-21
;  NUMBER OF SEQ ID NOS: 90
; SEQ ID NO 53
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Antisense Oligonucleotide
US-10-633-843-53

  Query Match             2.3%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 79;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        691 ATCACTTGGAAGATTTGTAT 710
              ||||||||||||||||||||
Db         20 ATCACTTGGAAGATTTGTAT 1


RESULT 72
US-10-633-843-54/c
; Sequence 54, Application US/10633843
; Publication No. US20040091919A1
; GENERAL INFORMATION:
;  APPLICANT: C. Frank Bennett
;  APPLICANT:  Kenneth Dobie
;  TITLE OF INVENTION: ANTISENSE MODULATION OF SUPEROXIDE DISMUTASE 1, SOLUBLE EXPRESSIO
;  FILE REFERENCE: ISPH-0756
;  CURRENT APPLICATION NUMBER: US/10/633,843
;  CURRENT FILING DATE:  2003-08-04
;  PRIOR APPLICATION NUMBER: US 09/888,360
;  PRIOR FILING DATE: 2001-06-21
;  NUMBER OF SEQ ID NOS: 90
; SEQ ID NO 54
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Antisense Oligonucleotide
US-10-633-843-54

  Query Match             2.3%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 79;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        707 GTATAGTTTTATAAAACTCA 726
```

```
                    ||||||||||||||||||||
Db         20 GTATAGTTTTATAAAACTCA 1


RESULT 73
US-10-633-843-55/c
; Sequence 55, Application US/10633843
; Publication No. US20040091919A1
; GENERAL INFORMATION:
;  APPLICANT: C. Frank Bennett
;  APPLICANT:  Kenneth Dobie
;  TITLE OF INVENTION: ANTISENSE MODULATION OF SUPEROXIDE DISMUTASE 1, SOLUBLE EXPRESSIO
;  FILE REFERENCE: ISPH-0756
;  CURRENT APPLICATION NUMBER: US/10/633,843
;  CURRENT FILING DATE:  2003-08-04
;  PRIOR APPLICATION NUMBER: US 09/888,360
;  PRIOR FILING DATE: 2001-06-21
;  NUMBER OF SEQ ID NOS: 90
; SEQ ID NO 55
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Antisense Oligonucleotide
US-10-633-843-55

  Query Match             2.3%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 79;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        710 TAGTTTTATAAAACTCAGTT 729
                ||||||||||||||||||||
Db         20 TAGTTTTATAAAACTCAGTT 1


RESULT 74
US-10-633-843-56/c
; Sequence 56, Application US/10633843
; Publication No. US20040091919A1
; GENERAL INFORMATION:
;  APPLICANT: C. Frank Bennett
;  APPLICANT:  Kenneth Dobie
;  TITLE OF INVENTION: ANTISENSE MODULATION OF SUPEROXIDE DISMUTASE 1, SOLUBLE EXPRESSIO
;  FILE REFERENCE: ISPH-0756
;  CURRENT APPLICATION NUMBER: US/10/633,843
;  CURRENT FILING DATE:  2003-08-04
;  PRIOR APPLICATION NUMBER: US 09/888,360
;  PRIOR FILING DATE: 2001-06-21
;  NUMBER OF SEQ ID NOS: 90
; SEQ ID NO 56
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Antisense Oligonucleotide
US-10-633-843-56

  Query Match             2.3%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 79;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        721 AACTCAGTTAAAATGTCTGT 740
                ||||||||||||||||||||
Db         20 AACTCAGTTAAAATGTCTGT 1


RESULT 75
US-10-633-843-57/c
; Sequence 57, Application US/10633843
; Publication No. US20040091919A1
; GENERAL INFORMATION:
;  APPLICANT: C. Frank Bennett
;  APPLICANT:  Kenneth Dobie
;  TITLE OF INVENTION: ANTISENSE MODULATION OF SUPEROXIDE DISMUTASE 1, SOLUBLE EXPRESSIO
;  FILE REFERENCE: ISPH-0756
;  CURRENT APPLICATION NUMBER: US/10/633,843
;  CURRENT FILING DATE:  2003-08-04
;  PRIOR APPLICATION NUMBER: US 09/888,360
;  PRIOR FILING DATE: 2001-06-21
;  NUMBER OF SEQ ID NOS: 90
; SEQ ID NO 57
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Antisense Oligonucleotide
US-10-633-843-57

  Query Match             2.3%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 79;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        727 GTTAAAATGTCTGTTTCAAT 746
                ||||||||||||||||||||
Db         20 GTTAAAATGTCTGTTTCAAT 1


RESULT 76
US-10-633-843-58/c
; Sequence 58, Application US/10633843
; Publication No. US20040091919A1
; GENERAL INFORMATION:
;  APPLICANT: C. Frank Bennett
;  APPLICANT:  Kenneth Dobie
;  TITLE OF INVENTION: ANTISENSE MODULATION OF SUPEROXIDE DISMUTASE 1, SOLUBLE EXPRESSIO
;  FILE REFERENCE: ISPH-0756
;  CURRENT APPLICATION NUMBER: US/10/633,843
;  CURRENT FILING DATE:  2003-08-04
;  PRIOR APPLICATION NUMBER: US 09/888,360
;  PRIOR FILING DATE: 2001-06-21
;  NUMBER OF SEQ ID NOS: 90
; SEQ ID NO 58
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Antisense Oligonucleotide
US-10-633-843-58

  Query Match             2.3%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 79;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        729 TAAAATGTCTGTTTCAATGA 748
                ||||||||||||||||||||
Db         20 TAAAATGTCTGTTTCAATGA 1


RESULT 77
US-10-633-843-59/c
; Sequence 59, Application US/10633843
; Publication No. US20040091919A1
; GENERAL INFORMATION:
;  APPLICANT: C. Frank Bennett
;  APPLICANT:  Kenneth Dobie
;  TITLE OF INVENTION: ANTISENSE MODULATION OF SUPEROXIDE DISMUTASE 1, SOLUBLE EXPRESSIO
;  FILE REFERENCE: ISPH-0756
;  CURRENT APPLICATION NUMBER: US/10/633,843
;  CURRENT FILING DATE:  2003-08-04
;  PRIOR APPLICATION NUMBER: US 09/888,360
;  PRIOR FILING DATE: 2001-06-21
;  NUMBER OF SEQ ID NOS: 90
; SEQ ID NO 59
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
```

```
;   FEATURE:
;   OTHER INFORMATION: Antisense Oligonucleotide
US-10-633-843-59

  Query Match             2.3%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 79;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        736 TCTGTTTCAATGACCTGTAT 755
              ||||||||||||||||||||
Db         20 TCTGTTTCAATGACCTGTAT 1


RESULT 78
US-10-633-843-60/c
; Sequence 60, Application US/10633843
; Publication No. US20040091919A1
; GENERAL INFORMATION:
;  APPLICANT: C. Frank Bennett
;  APPLICANT:  Kenneth Dobie
;  TITLE OF INVENTION: ANTISENSE MODULATION OF SUPEROXIDE DISMUTASE 1, SOLUBLE EXPRESSIC
;  FILE REFERENCE: ISPH-0756
;  CURRENT APPLICATION NUMBER: US/10/633,843
;  CURRENT FILING DATE:  2003-08-04
;  PRIOR APPLICATION NUMBER: US 09/888,360
;  PRIOR FILING DATE: 2001-06-21
;  NUMBER OF SEQ ID NOS: 90
; SEQ ID NO 60
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Antisense Oligonucleotide
US-10-633-843-60

  Query Match             2.3%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 79;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        761 CAGACTTAAATCACAGATGG 780
              ||||||||||||||||||||
Db         20 CAGACTTAAATCACAGATGG 1


RESULT 79
US-10-633-843-61/c
; Sequence 61, Application US/10633843
; Publication No. US20040091919A1
; GENERAL INFORMATION:
;  APPLICANT: C. Frank Bennett
;  APPLICANT:  Kenneth Dobie
;  TITLE OF INVENTION: ANTISENSE MODULATION OF SUPEROXIDE DISMUTASE 1, SOLUBLE EXPRESSIC
;  FILE REFERENCE: ISPH-0756
;  CURRENT APPLICATION NUMBER: US/10/633,843
;  CURRENT FILING DATE:  2003-08-04
;  PRIOR APPLICATION NUMBER: US 09/888,360
;  PRIOR FILING DATE: 2001-06-21
;  NUMBER OF SEQ ID NOS: 90
; SEQ ID NO 61
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Antisense Oligonucleotide
US-10-633-843-61

  Query Match             2.3%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 79;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        769 AATCACAGATGGGTATTAAA 788
              ||||||||||||||||||||
Db         20 AATCACAGATGGGTATTAAA 1


RESULT 80
US-10-633-843-62/c
; Sequence 62, Application US/10633843
; Publication No. US20040091919A1
; GENERAL INFORMATION:
;  APPLICANT: C. Frank Bennett
;  APPLICANT:  Kenneth Dobie
;  TITLE OF INVENTION: ANTISENSE MODULATION OF SUPEROXIDE DISMUTASE 1, SOLUBLE EXPRESSION
;  FILE REFERENCE: ISPH-0756
;  CURRENT APPLICATION NUMBER: US/10/633,843
;  CURRENT FILING DATE:  2003-08-04
;  PRIOR APPLICATION NUMBER: US 09/888,360
;  PRIOR FILING DATE: 2001-06-21
;  NUMBER OF SEQ ID NOS: 90
; SEQ ID NO 62
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Antisense Oligonucleotide
US-10-633-843-62

  Query Match             2.3%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 79;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        771 TCACAGATGGGTATTAAACT 790
              ||||||||||||||||||||
Db         20 TCACAGATGGGTATTAAACT 1


RESULT 81
US-10-633-843-63/c
; Sequence 63, Application US/10633843
; Publication No. US20040091919A1
; GENERAL INFORMATION:
;  APPLICANT: C. Frank Bennett
;  APPLICANT:  Kenneth Dobie
;  TITLE OF INVENTION: ANTISENSE MODULATION OF SUPEROXIDE DISMUTASE 1, SOLUBLE EXPRESSION
;  FILE REFERENCE: ISPH-0756
;  CURRENT APPLICATION NUMBER: US/10/633,843
;  CURRENT FILING DATE:  2003-08-04
;  PRIOR APPLICATION NUMBER: US 09/888,360
;  PRIOR FILING DATE: 2001-06-21
;  NUMBER OF SEQ ID NOS: 90
; SEQ ID NO 63
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Antisense Oligonucleotide
US-10-633-843-63

  Query Match             2.3%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 79;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        787 AACTTGTCAGAATTTCTTTG 806
              ||||||||||||||||||||
Db         20 AACTTGTCAGAATTTCTTTG 1


RESULT 82
US-10-633-843-64/c
; Sequence 64, Application US/10633843
; Publication No. US20040091919A1
; GENERAL INFORMATION:
;  APPLICANT: C. Frank Bennett
;  APPLICANT:  Kenneth Dobie
;  TITLE OF INVENTION: ANTISENSE MODULATION OF SUPEROXIDE DISMUTASE 1, SOLUBLE EXPRESSION
;  FILE REFERENCE: ISPH-0756
```

```
;  CURRENT APPLICATION NUMBER: US/10/633,843
;  CURRENT FILING DATE:  2003-08-04
;  PRIOR APPLICATION NUMBER: US 09/888,360
;  PRIOR FILING DATE: 2001-06-21
;  NUMBER OF SEQ ID NOS: 90
; SEQ ID NO 64
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Antisense Oligonucleotide
US-10-633-843-64

  Query Match             2.3%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 79;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        795 AGAATTTCTTTGTCATTCAA 814
              ||||||||||||||||||||
Db         20 AGAATTTCTTTGTCATTCAA 1


RESULT 83
US-10-633-843-65/c
; Sequence 65, Application US/10633843
; Publication No. US20040091919A1
; GENERAL INFORMATION:
;  APPLICANT: C. Frank Bennett
;  APPLICANT:  Kenneth Dobie
;  TITLE OF INVENTION: ANTISENSE MODULATION OF SUPEROXIDE DISMUTASE 1, SOLUBLE EXPRESSIO
;  FILE REFERENCE: ISPH-0756
;  CURRENT APPLICATION NUMBER: US/10/633,843
;  CURRENT FILING DATE:  2003-08-04
;  PRIOR APPLICATION NUMBER: US 09/888,360
;  PRIOR FILING DATE: 2001-06-21
;  NUMBER OF SEQ ID NOS: 90
; SEQ ID NO 65
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Antisense Oligonucleotide
US-10-633-843-65

  Query Match             2.3%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 79;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        801 TCTTTGTCATTCAAGCCTGT 820
              ||||||||||||||||||||
Db         20 TCTTTGTCATTCAAGCCTGT 1


RESULT 84
US-10-633-843-66/c
; Sequence 66, Application US/10633843
; Publication No. US20040091919A1
; GENERAL INFORMATION:
;  APPLICANT: C. Frank Bennett
;  APPLICANT:  Kenneth Dobie
;  TITLE OF INVENTION: ANTISENSE MODULATION OF SUPEROXIDE DISMUTASE 1, SOLUBLE EXPRESSIO
;  FILE REFERENCE: ISPH-0756
;  CURRENT APPLICATION NUMBER: US/10/633,843
;  CURRENT FILING DATE:  2003-08-04
;  PRIOR APPLICATION NUMBER: US 09/888,360
;  PRIOR FILING DATE: 2001-06-21
;  NUMBER OF SEQ ID NOS: 90
; SEQ ID NO 66
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Antisense Oligonucleotide
US-10-633-843-66

  Query Match             2.3%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 79;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        805 TGTCATTCAAGCCTGTGAAT 824
              ||||||||||||||||||||
Db         20 TGTCATTCAAGCCTGTGAAT 1


RESULT 85
US-10-633-843-67/c
; Sequence 67, Application US/10633843
; Publication No. US20040091919A1
; GENERAL INFORMATION:
;  APPLICANT: C. Frank Bennett
;  APPLICANT:  Kenneth Dobie
;  TITLE OF INVENTION: ANTISENSE MODULATION OF SUPEROXIDE DISMUTASE 1, SOLUBLE EXPRESSIO
;  FILE REFERENCE: ISPH-0756
;  CURRENT APPLICATION NUMBER: US/10/633,843
;  CURRENT FILING DATE:  2003-08-04
;  PRIOR APPLICATION NUMBER: US 09/888,360
;  PRIOR FILING DATE: 2001-06-21
;  NUMBER OF SEQ ID NOS: 90
; SEQ ID NO 67
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Antisense Oligonucleotide
US-10-633-843-67

  Query Match             2.3%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 79;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        812 CAAGCCTGTGAATAAAAACC 831
              ||||||||||||||||||||
Db         20 CAAGCCTGTGAATAAAAACC 1


RESULT 86
US-10-633-843-68/c
; Sequence 68, Application US/10633843
; Publication No. US20040091919A1
; GENERAL INFORMATION:
;  APPLICANT: C. Frank Bennett
;  APPLICANT:  Kenneth Dobie
;  TITLE OF INVENTION: ANTISENSE MODULATION OF SUPEROXIDE DISMUTASE 1, SOLUBLE EXPRESSIO
;  FILE REFERENCE: ISPH-0756
;  CURRENT APPLICATION NUMBER: US/10/633,843
;  CURRENT FILING DATE:  2003-08-04
;  PRIOR APPLICATION NUMBER: US 09/888,360
;  PRIOR FILING DATE: 2001-06-21
;  NUMBER OF SEQ ID NOS: 90
; SEQ ID NO 68
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Antisense Oligonucleotide
US-10-633-843-68

  Query Match             2.3%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 79;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        814 AGCCTGTGAATAAAAACCCT 833
              ||||||||||||||||||||
Db         20 AGCCTGTGAATAAAAACCCT 1
```

```
RESULT 87
US-10-633-843-69/c
; Sequence 69, Application US/10633843
; Publication No. US20040091919A1
; GENERAL INFORMATION:
;  APPLICANT: C. Frank Bennett
;  APPLICANT:  Kenneth Dobie
;  TITLE OF INVENTION: ANTISENSE MODULATION OF SUPEROXIDE DISMUTASE 1, SOLUBLE EXPRESSIO
;  FILE REFERENCE: ISPH-0756
;  CURRENT APPLICATION NUMBER: US/10/633,843
;  CURRENT FILING DATE:  2003-08-04
;  PRIOR APPLICATION NUMBER: US 09/888,360
;  PRIOR FILING DATE: 2001-06-21
;  NUMBER OF SEQ ID NOS: 90
; SEQ ID NO 69
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Antisense Oligonucleotide
US-10-633-843-69

  Query Match             2.3%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 79;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        818 TGTGAATAAAAACCCTGTAT 837
              ||||||||||||||||||||
Db         20 TGTGAATAAAAACCCTGTAT 1


RESULT 88
US-10-633-843-70/c
; Sequence 70, Application US/10633843
; Publication No. US20040091919A1
; GENERAL INFORMATION:
;  APPLICANT: C. Frank Bennett
;  APPLICANT:  Kenneth Dobie
;  TITLE OF INVENTION: ANTISENSE MODULATION OF SUPEROXIDE DISMUTASE 1, SOLUBLE EXPRESSIO
;  FILE REFERENCE: ISPH-0756
;  CURRENT APPLICATION NUMBER: US/10/633,843
;  CURRENT FILING DATE:  2003-08-04
;  PRIOR APPLICATION NUMBER: US 09/888,360
;  PRIOR FILING DATE: 2001-06-21
;  NUMBER OF SEQ ID NOS: 90
; SEQ ID NO 70
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Antisense Oligonucleotide
US-10-633-843-70

  Query Match             2.3%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 79;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        820 TGAATAAAAACCCTGTATGG 839
              ||||||||||||||||||||
Db         20 TGAATAAAAACCCTGTATGG 1


RESULT 89
US-10-633-843-71/c
; Sequence 71, Application US/10633843
; Publication No. US20040091919A1
; GENERAL INFORMATION:
;  APPLICANT: C. Frank Bennett
;  APPLICANT:  Kenneth Dobie
;  TITLE OF INVENTION: ANTISENSE MODULATION OF SUPEROXIDE DISMUTASE 1, SOLUBLE EXPRESSIO
;  FILE REFERENCE: ISPH-0756
;  CURRENT APPLICATION NUMBER: US/10/633,843
;  CURRENT FILING DATE:  2003-08-04
;  PRIOR APPLICATION NUMBER: US 09/888,360
;  PRIOR FILING DATE: 2001-06-21
;  NUMBER OF SEQ ID NOS: 90
; SEQ ID NO 71
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Antisense Oligonucleotide
US-10-633-843-71

  Query Match             2.3%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 79;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        825 AAAAACCCTGTATGGCACTT 844
              ||||||||||||||||||||
Db         20 AAAAACCCTGTATGGCACTT 1


RESULT 90
US-10-633-843-72/c
; Sequence 72, Application US/10633843
; Publication No. US20040091919A1
; GENERAL INFORMATION:
;  APPLICANT: C. Frank Bennett
;  APPLICANT:  Kenneth Dobie
;  TITLE OF INVENTION: ANTISENSE MODULATION OF SUPEROXIDE DISMUTASE 1, SOLUBLE EXPRESSIO
;  FILE REFERENCE: ISPH-0756
;  CURRENT APPLICATION NUMBER: US/10/633,843
;  CURRENT FILING DATE:  2003-08-04
;  PRIOR APPLICATION NUMBER: US 09/888,360
;  PRIOR FILING DATE: 2001-06-21
;  NUMBER OF SEQ ID NOS: 90
; SEQ ID NO 72
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Antisense Oligonucleotide
US-10-633-843-72

  Query Match             2.3%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 79;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        829 ACCCTGTATGGCACTTATTA 848
              ||||||||||||||||||||
Db         20 ACCCTGTATGGCACTTATTA 1


RESULT 91
US-10-633-843-73/c
; Sequence 73, Application US/10633843
; Publication No. US20040091919A1
; GENERAL INFORMATION:
;  APPLICANT: C. Frank Bennett
;  APPLICANT:  Kenneth Dobie
;  TITLE OF INVENTION: ANTISENSE MODULATION OF SUPEROXIDE DISMUTASE 1, SOLUBLE EXPRESSIO
;  FILE REFERENCE: ISPH-0756
;  CURRENT APPLICATION NUMBER: US/10/633,843
;  CURRENT FILING DATE:  2003-08-04
;  PRIOR APPLICATION NUMBER: US 09/888,360
;  PRIOR FILING DATE: 2001-06-21
;  NUMBER OF SEQ ID NOS: 90
; SEQ ID NO 73
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Antisense Oligonucleotide
US-10-633-843-73
```

```
  Query Match             2.3%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 79;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        832 CTGTATGGCACTTATTATGA 851
              ||||||||||||||||||||
Db         20 CTGTATGGCACTTATTATGA 1


RESULT 92
US-10-633-843-74/c
; Sequence 74, Application US/10633843
; Publication No. US20040091919A1
; GENERAL INFORMATION:
;  APPLICANT: C. Frank Bennett
;  APPLICANT:  Kenneth Dobie
;  TITLE OF INVENTION: ANTISENSE MODULATION OF SUPEROXIDE DISMUTASE 1, SOLUBLE EXPRESSIC
;  FILE REFERENCE: ISPH-0756
;  CURRENT APPLICATION NUMBER: US/10/633,843
;  CURRENT FILING DATE:  2003-08-04
;  PRIOR APPLICATION NUMBER: US 09/888,360
;  PRIOR FILING DATE: 2001-06-21
;  NUMBER OF SEQ ID NOS: 90
; SEQ ID NO 74
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Antisense Oligonucleotide
US-10-633-843-74

  Query Match             2.3%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 79;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        833 TGTATGGCACTTATTATGAG 852
              ||||||||||||||||||||
Db         20 TGTATGGCACTTATTATGAG 1


RESULT 93
US-10-633-843-75/c
; Sequence 75, Application US/10633843
; Publication No. US20040091919A1
; GENERAL INFORMATION:
;  APPLICANT: C. Frank Bennett
;  APPLICANT:  Kenneth Dobie
;  TITLE OF INVENTION: ANTISENSE MODULATION OF SUPEROXIDE DISMUTASE 1, SOLUBLE EXPRESSIC
;  FILE REFERENCE: ISPH-0756
;  CURRENT APPLICATION NUMBER: US/10/633,843
;  CURRENT FILING DATE:  2003-08-04
;  PRIOR APPLICATION NUMBER: US 09/888,360
;  PRIOR FILING DATE: 2001-06-21
;  NUMBER OF SEQ ID NOS: 90
; SEQ ID NO 75
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Antisense Oligonucleotide
US-10-633-843-75

  Query Match             2.3%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 79;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        835 TATGGCACTTATTATGAGGC 854
              ||||||||||||||||||||
Db         20 TATGGCACTTATTATGAGGC 1


RESULT 94
US-10-633-843-76/c
; Sequence 76, Application US/10633843
; Publication No. US20040091919A1
; GENERAL INFORMATION:
;  APPLICANT: C. Frank Bennett
;  APPLICANT:  Kenneth Dobie
;  TITLE OF INVENTION: ANTISENSE MODULATION OF SUPEROXIDE DISMUTASE 1, SOLUBLE EXPRESSION
;  FILE REFERENCE: ISPH-0756
;  CURRENT APPLICATION NUMBER: US/10/633,843
;  CURRENT FILING DATE:  2003-08-04
;  PRIOR APPLICATION NUMBER: US 09/888,360
;  PRIOR FILING DATE: 2001-06-21
;  NUMBER OF SEQ ID NOS: 90
; SEQ ID NO 76
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Antisense Oligonucleotide
US-10-633-843-76

  Query Match             2.3%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 79;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        843 TTATTATGAGGCTATTAAAA 862
              ||||||||||||||||||||
Db         20 TTATTATGAGGCTATTAAAA 1


RESULT 95
US-10-633-843-77/c
; Sequence 77, Application US/10633843
; Publication No. US20040091919A1
; GENERAL INFORMATION:
;  APPLICANT: C. Frank Bennett
;  APPLICANT:  Kenneth Dobie
;  TITLE OF INVENTION: ANTISENSE MODULATION OF SUPEROXIDE DISMUTASE 1, SOLUBLE EXPRESSION
;  FILE REFERENCE: ISPH-0756
;  CURRENT APPLICATION NUMBER: US/10/633,843
;  CURRENT FILING DATE:  2003-08-04
;  PRIOR APPLICATION NUMBER: US 09/888,360
;  PRIOR FILING DATE: 2001-06-21
;  NUMBER OF SEQ ID NOS: 90
; SEQ ID NO 77
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Antisense Oligonucleotide
US-10-633-843-77

  Query Match             2.3%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 79;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        849 TGAGGCTATTAAAAGAATCC 868
              ||||||||||||||||||||
Db         20 TGAGGCTATTAAAAGAATCC 1


RESULT 96
US-10-672-866-4
; Sequence 4, Application US/10672866
; Publication No. US20050019915A1
; GENERAL INFORMATION:
;  APPLICANT: C. Frank Bennett
;  APPLICANT:  Kenneth Dobie
;  TITLE OF INVENTION: ANTISENSE MODULATION OF SUPEROXIDE DISMUTASE 1,
;  TITLE OF INVENTION:  SOLUBLE
;  TITLE OF INVENTION:  EXPRESSION
;  FILE REFERENCE: RTS-0242
;  CURRENT APPLICATION NUMBER: US/10/672,866
;  CURRENT FILING DATE:  2003-09-26
```

; PRIOR APPLICATION NUMBER: 10/633,843
; PRIOR FILING DATE: 2003-08-04
; PRIOR APPLICATION NUMBER: 09/888,360
; PRIOR FILING DATE: 2001-06-21
; NUMBER OF SEQ ID NOS: 339
; SEQ ID NO 4
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: PCR Primer
US-10-672-866-4

Query Match 2.3%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 79;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 49 CGTGGCCTAGCGAGTTATGG 68
||||||||||||||||||||
Db 1 CGTGGCCTAGCGAGTTATGG 20

RESULT 97
US-10-672-866-5/c
; Sequence 5, Application US/10672866
; Publication No. US20050019915A1
; GENERAL INFORMATION:
; APPLICANT: C. Frank Bennett
; APPLICANT: Kenneth Dobie
; TITLE OF INVENTION: ANTISENSE MODULATION OF SUPEROXIDE DISMUTASE 1,
; TITLE OF INVENTION: SOLUBLE
; TITLE OF INVENTION: EXPRESSION
; FILE REFERENCE: RTS-0242
; CURRENT APPLICATION NUMBER: US/10/672,866
; CURRENT FILING DATE: 2003-09-26
; PRIOR APPLICATION NUMBER: 10/633,843
; PRIOR FILING DATE: 2003-08-04
; PRIOR APPLICATION NUMBER: 09/888,360
; PRIOR FILING DATE: 2001-06-21
; NUMBER OF SEQ ID NOS: 339
; SEQ ID NO 5
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: PCR Primer
US-10-672-866-5

Query Match 2.3%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 79;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 108 TGCAGGGCATCATCAATTTC 127
||||||||||||||||||||
Db 20 TGCAGGGCATCATCAATTTC 1

RESULT 98
US-10-672-866-13/c
; Sequence 13, Application US/10672866
; Publication No. US20050019915A1
; GENERAL INFORMATION:
; APPLICANT: C. Frank Bennett
; APPLICANT: Kenneth Dobie
; TITLE OF INVENTION: ANTISENSE MODULATION OF SUPEROXIDE DISMUTASE 1,
; TITLE OF INVENTION: SOLUBLE
; TITLE OF INVENTION: EXPRESSION
; FILE REFERENCE: RTS-0242
; CURRENT APPLICATION NUMBER: US/10/672,866
; CURRENT FILING DATE: 2003-09-26
; PRIOR APPLICATION NUMBER: 10/633,843
; PRIOR FILING DATE: 2003-08-04
; PRIOR APPLICATION NUMBER: 09/888,360
; PRIOR FILING DATE: 2001-06-21
; NUMBER OF SEQ ID NOS: 339
; SEQ ID NO 13
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-10-672-866-13

Query Match 2.3%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 79;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 73 GAAGGCCGTGTGCGTGCTGA 92
||||||||||||||||||||
Db 20 GAAGGCCGTGTGCGTGCTGA 1

RESULT 99
US-10-672-866-14/c
; Sequence 14, Application US/10672866
; Publication No. US20050019915A1
; GENERAL INFORMATION:
; APPLICANT: C. Frank Bennett
; APPLICANT: Kenneth Dobie
; TITLE OF INVENTION: ANTISENSE MODULATION OF SUPEROXIDE DISMUTASE 1,
; TITLE OF INVENTION: SOLUBLE
; TITLE OF INVENTION: EXPRESSION
; FILE REFERENCE: RTS-0242
; CURRENT APPLICATION NUMBER: US/10/672,866
; CURRENT FILING DATE: 2003-09-26
; PRIOR APPLICATION NUMBER: 10/633,843
; PRIOR FILING DATE: 2003-08-04
; PRIOR APPLICATION NUMBER: 09/888,360
; PRIOR FILING DATE: 2001-06-21
; NUMBER OF SEQ ID NOS: 339
; SEQ ID NO 14
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-10-672-866-14

Query Match 2.3%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 79;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 78 CCGTGTGCGTGCTGAAGGGC 97
||||||||||||||||||||
Db 20 CCGTGTGCGTGCTGAAGGGC 1

RESULT 100
US-10-672-866-15/c
; Sequence 15, Application US/10672866
; Publication No. US20050019915A1
; GENERAL INFORMATION:
; APPLICANT: C. Frank Bennett
; APPLICANT: Kenneth Dobie
; TITLE OF INVENTION: ANTISENSE MODULATION OF SUPEROXIDE DISMUTASE 1,
; TITLE OF INVENTION: SOLUBLE
; TITLE OF INVENTION: EXPRESSION
; FILE REFERENCE: RTS-0242
; CURRENT APPLICATION NUMBER: US/10/672,866
; CURRENT FILING DATE: 2003-09-26
; PRIOR APPLICATION NUMBER: 10/633,843
; PRIOR FILING DATE: 2003-08-04
; PRIOR APPLICATION NUMBER: 09/888,360
; PRIOR FILING DATE: 2001-06-21
; NUMBER OF SEQ ID NOS: 339
; SEQ ID NO 15

```
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Antisense Oligonucleotide
US-10-672-866-15

  Query Match             2.3%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 79;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy         81 TGTGCGTGCTGAAGGGCGAC 100
              ||||||||||||||||||||
Db         20 TGTGCGTGCTGAAGGGCGAC 1


RESULT 101
US-10-672-866-16/c
; Sequence 16, Application US/10672866
; Publication No. US20050019915A1
; GENERAL INFORMATION:
;  APPLICANT: C. Frank Bennett
;  APPLICANT:  Kenneth Dobie
;  TITLE OF INVENTION: ANTISENSE MODULATION OF SUPEROXIDE DISMUTASE 1,
;  TITLE OF INVENTION:  SOLUBLE
;  TITLE OF INVENTION:  EXPRESSION
;  FILE REFERENCE: RTS-0242
;  CURRENT APPLICATION NUMBER: US/10/672,866
;  CURRENT FILING DATE:  2003-09-26
;  PRIOR APPLICATION NUMBER: 10/633,843
;  PRIOR FILING DATE: 2003-08-04
;  PRIOR APPLICATION NUMBER: 09/888,360
;  PRIOR FILING DATE: 2001-06-21
;  NUMBER OF SEQ ID NOS: 339
; SEQ ID NO 16
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Antisense Oligonucleotide
US-10-672-866-16

  Query Match             2.3%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 79;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy         14 GGTTTCCGTTGCAGTCCTCG 33
              ||||||||||||||||||||
Db         20 GGTTTCCGTTGCAGTCCTCG 1


RESULT 102
US-10-672-866-17/c
; Sequence 17, Application US/10672866
; Publication No. US20050019915A1
; GENERAL INFORMATION:
;  APPLICANT: C. Frank Bennett
;  APPLICANT:  Kenneth Dobie
;  TITLE OF INVENTION: ANTISENSE MODULATION OF SUPEROXIDE DISMUTASE 1,
;  TITLE OF INVENTION:  SOLUBLE
;  TITLE OF INVENTION:  EXPRESSION
;  FILE REFERENCE: RTS-0242
;  CURRENT APPLICATION NUMBER: US/10/672,866
;  CURRENT FILING DATE:  2003-09-26
;  PRIOR APPLICATION NUMBER: 10/633,843
;  PRIOR FILING DATE: 2003-08-04
;  PRIOR APPLICATION NUMBER: 09/888,360
;  PRIOR FILING DATE: 2001-06-21
;  NUMBER OF SEQ ID NOS: 339
; SEQ ID NO 17
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Antisense Oligonucleotide
US-10-672-866-17

  Query Match             2.3%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 79;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy         19 CCGTTGCAGTCCTCGGAACC 38
              ||||||||||||||||||||
Db         20 CCGTTGCAGTCCTCGGAACC 1


RESULT 103
US-10-672-866-18/c
; Sequence 18, Application US/10672866
; Publication No. US20050019915A1
; GENERAL INFORMATION:
;  APPLICANT: C. Frank Bennett
;  APPLICANT:  Kenneth Dobie
;  TITLE OF INVENTION: ANTISENSE MODULATION OF SUPEROXIDE DISMUTASE 1,
;  TITLE OF INVENTION:  SOLUBLE
;  TITLE OF INVENTION:  EXPRESSION
;  FILE REFERENCE: RTS-0242
;  CURRENT APPLICATION NUMBER: US/10/672,866
;  CURRENT FILING DATE:  2003-09-26
;  PRIOR APPLICATION NUMBER: 10/633,843
;  PRIOR FILING DATE: 2003-08-04
;  PRIOR APPLICATION NUMBER: 09/888,360
;  PRIOR FILING DATE: 2001-06-21
;  NUMBER OF SEQ ID NOS: 339
; SEQ ID NO 18
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Antisense Oligonucleotide
US-10-672-866-18

  Query Match             2.3%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 79;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy         23 TGCAGTCCTCGGAACCAGGA 42
              ||||||||||||||||||||
Db         20 TGCAGTCCTCGGAACCAGGA 1


RESULT 104
US-10-672-866-19/c
; Sequence 19, Application US/10672866
; Publication No. US20050019915A1
; GENERAL INFORMATION:
;  APPLICANT: C. Frank Bennett
;  APPLICANT:  Kenneth Dobie
;  TITLE OF INVENTION: ANTISENSE MODULATION OF SUPEROXIDE DISMUTASE 1,
;  TITLE OF INVENTION:  SOLUBLE
;  TITLE OF INVENTION:  EXPRESSION
;  FILE REFERENCE: RTS-0242
;  CURRENT APPLICATION NUMBER: US/10/672,866
;  CURRENT FILING DATE:  2003-09-26
;  PRIOR APPLICATION NUMBER: 10/633,843
;  PRIOR FILING DATE: 2003-08-04
;  PRIOR APPLICATION NUMBER: 09/888,360
;  PRIOR FILING DATE: 2001-06-21
;  NUMBER OF SEQ ID NOS: 339
; SEQ ID NO 19
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Antisense Oligonucleotide
US-10-672-866-19
```

Query Match 2.3%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 79;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 27 GTCCTCGGAACCAGGACCTC 46
||||||||||||||||||||
Db 20 GTCCTCGGAACCAGGACCTC 1

RESULT 105
US-10-672-866-20/c
; Sequence 20, Application US/10672866
; Publication No. US20050019915A1
; GENERAL INFORMATION:
; APPLICANT: C. Frank Bennett
; APPLICANT: Kenneth Dobie
; TITLE OF INVENTION: ANTISENSE MODULATION OF SUPEROXIDE DISMUTASE 1,
; TITLE OF INVENTION: SOLUBLE
; TITLE OF INVENTION: EXPRESSION
; FILE REFERENCE: RTS-0242
; CURRENT APPLICATION NUMBER: US/10/672,866
; CURRENT FILING DATE: 2003-09-26
; PRIOR APPLICATION NUMBER: 10/633,843
; PRIOR FILING DATE: 2003-08-04
; PRIOR APPLICATION NUMBER: 09/888,360
; PRIOR FILING DATE: 2001-06-21
; NUMBER OF SEQ ID NOS: 339
; SEQ ID NO 20
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-10-672-866-20

Query Match 2.3%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 79;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 38 CAGGACCTCGGCGTGGCCTA 57
||||||||||||||||||||
Db 20 CAGGACCTCGGCGTGGCCTA 1

RESULT 106
US-10-672-866-21/c
; Sequence 21, Application US/10672866
; Publication No. US20050019915A1
; GENERAL INFORMATION:
; APPLICANT: C. Frank Bennett
; APPLICANT: Kenneth Dobie
; TITLE OF INVENTION: ANTISENSE MODULATION OF SUPEROXIDE DISMUTASE 1,
; TITLE OF INVENTION: SOLUBLE
; TITLE OF INVENTION: EXPRESSION
; FILE REFERENCE: RTS-0242
; CURRENT APPLICATION NUMBER: US/10/672,866
; CURRENT FILING DATE: 2003-09-26
; PRIOR APPLICATION NUMBER: 10/633,843
; PRIOR FILING DATE: 2003-08-04
; PRIOR APPLICATION NUMBER: 09/888,360
; PRIOR FILING DATE: 2001-06-21
; NUMBER OF SEQ ID NOS: 339
; SEQ ID NO 21
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-10-672-866-21

Query Match 2.3%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 79;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 53 GCCTAGCGAGTTATGGCGAC 72
||||||||||||||||||||
Db 20 GCCTAGCGAGTTATGGCGAC 1

RESULT 107
US-10-672-866-22/c
; Sequence 22, Application US/10672866
; Publication No. US20050019915A1
; GENERAL INFORMATION:
; APPLICANT: C. Frank Bennett
; APPLICANT: Kenneth Dobie
; TITLE OF INVENTION: ANTISENSE MODULATION OF SUPEROXIDE DISMUTASE 1,
; TITLE OF INVENTION: SOLUBLE
; TITLE OF INVENTION: EXPRESSION
; FILE REFERENCE: RTS-0242
; CURRENT APPLICATION NUMBER: US/10/672,866
; CURRENT FILING DATE: 2003-09-26
; PRIOR APPLICATION NUMBER: 10/633,843
; PRIOR FILING DATE: 2003-08-04
; PRIOR APPLICATION NUMBER: 09/888,360
; PRIOR FILING DATE: 2001-06-21
; NUMBER OF SEQ ID NOS: 339
; SEQ ID NO 22
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-10-672-866-22

Query Match 2.3%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 79;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 96 GCGACGGCCCAGTGCAGGGC 115
||||||||||||||||||||
Db 20 GCGACGGCCCAGTGCAGGGC 1

RESULT 108
US-10-672-866-23/c
; Sequence 23, Application US/10672866
; Publication No. US20050019915A1
; GENERAL INFORMATION:
; APPLICANT: C. Frank Bennett
; APPLICANT: Kenneth Dobie
; TITLE OF INVENTION: ANTISENSE MODULATION OF SUPEROXIDE DISMUTASE 1,
; TITLE OF INVENTION: SOLUBLE
; TITLE OF INVENTION: EXPRESSION
; FILE REFERENCE: RTS-0242
; CURRENT APPLICATION NUMBER: US/10/672,866
; CURRENT FILING DATE: 2003-09-26
; PRIOR APPLICATION NUMBER: 10/633,843
; PRIOR FILING DATE: 2003-08-04
; PRIOR APPLICATION NUMBER: 09/888,360
; PRIOR FILING DATE: 2001-06-21
; NUMBER OF SEQ ID NOS: 339
; SEQ ID NO 23
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-10-672-866-23

Query Match 2.3%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 79;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 106 AGTGCAGGGCATCATCAATT 125

```
                    ||||||||||||||||||||
Db         20 AGTGCAGGGCATCATCAATT 1


RESULT 109
US-10-672-866-24/c
; Sequence 24, Application US/10672866
; Publication No. US20050019915A1
; GENERAL INFORMATION:
;  APPLICANT: C. Frank Bennett
;  APPLICANT:  Kenneth Dobie
;  TITLE OF INVENTION: ANTISENSE MODULATION OF SUPEROXIDE DISMUTASE 1,
;  TITLE OF INVENTION:  SOLUBLE
;  TITLE OF INVENTION:  EXPRESSION
;  FILE REFERENCE: RTS-0242
;  CURRENT APPLICATION NUMBER: US/10/672,866
;  CURRENT FILING DATE:  2003-09-26
;  PRIOR APPLICATION NUMBER: 10/633,843
;  PRIOR FILING DATE: 2003-08-04
;  PRIOR APPLICATION NUMBER: 09/888,360
;  PRIOR FILING DATE: 2001-06-21
;  NUMBER OF SEQ ID NOS: 339
; SEQ ID NO 24
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Antisense Oligonucleotide
US-10-672-866-24

  Query Match             2.3%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 79;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        135 AGGAAAGTAATGGACCAGTG 154
                ||||||||||||||||||||
Db         20 AGGAAAGTAATGGACCAGTG 1


RESULT 110
US-10-672-866-25/c
; Sequence 25, Application US/10672866
; Publication No. US20050019915A1
; GENERAL INFORMATION:
;  APPLICANT: C. Frank Bennett
;  APPLICANT:  Kenneth Dobie
;  TITLE OF INVENTION: ANTISENSE MODULATION OF SUPEROXIDE DISMUTASE 1,
;  TITLE OF INVENTION:  SOLUBLE
;  TITLE OF INVENTION:  EXPRESSION
;  FILE REFERENCE: RTS-0242
;  CURRENT APPLICATION NUMBER: US/10/672,866
;  CURRENT FILING DATE:  2003-09-26
;  PRIOR APPLICATION NUMBER: 10/633,843
;  PRIOR FILING DATE: 2003-08-04
;  PRIOR APPLICATION NUMBER: 09/888,360
;  PRIOR FILING DATE: 2001-06-21
;  NUMBER OF SEQ ID NOS: 339
; SEQ ID NO 25
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Antisense Oligonucleotide
US-10-672-866-25

  Query Match             2.3%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 79;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        142 TAATGGACCAGTGAAGGTGT 161
                ||||||||||||||||||||
Db         20 TAATGGACCAGTGAAGGTGT 1


RESULT 111
US-10-672-866-26/c
; Sequence 26, Application US/10672866
; Publication No. US20050019915A1
; GENERAL INFORMATION:
;  APPLICANT: C. Frank Bennett
;  APPLICANT:  Kenneth Dobie
;  TITLE OF INVENTION: ANTISENSE MODULATION OF SUPEROXIDE DISMUTASE 1,
;  TITLE OF INVENTION:  SOLUBLE
;  TITLE OF INVENTION:  EXPRESSION
;  FILE REFERENCE: RTS-0242
;  CURRENT APPLICATION NUMBER: US/10/672,866
;  CURRENT FILING DATE:  2003-09-26
;  PRIOR APPLICATION NUMBER: 10/633,843
;  PRIOR FILING DATE: 2003-08-04
;  PRIOR APPLICATION NUMBER: 09/888,360
;  PRIOR FILING DATE: 2001-06-21
;  NUMBER OF SEQ ID NOS: 339
; SEQ ID NO 26
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Antisense Oligonucleotide
US-10-672-866-26

  Query Match             2.3%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 79;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        144 ATGGACCAGTGAAGGTGTGG 163
                ||||||||||||||||||||
Db         20 ATGGACCAGTGAAGGTGTGG 1


RESULT 112
US-10-672-866-27/c
; Sequence 27, Application US/10672866
; Publication No. US20050019915A1
; GENERAL INFORMATION:
;  APPLICANT: C. Frank Bennett
;  APPLICANT:  Kenneth Dobie
;  TITLE OF INVENTION: ANTISENSE MODULATION OF SUPEROXIDE DISMUTASE 1,
;  TITLE OF INVENTION:  SOLUBLE
;  TITLE OF INVENTION:  EXPRESSION
;  FILE REFERENCE: RTS-0242
;  CURRENT APPLICATION NUMBER: US/10/672,866
;  CURRENT FILING DATE:  2003-09-26
;  PRIOR APPLICATION NUMBER: 10/633,843
;  PRIOR FILING DATE: 2003-08-04
;  PRIOR APPLICATION NUMBER: 09/888,360
;  PRIOR FILING DATE: 2001-06-21
;  NUMBER OF SEQ ID NOS: 339
; SEQ ID NO 27
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Antisense Oligonucleotide
US-10-672-866-27

  Query Match             2.3%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 79;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        161 TGGGGAAGCATTAAAGGACT 180
                ||||||||||||||||||||
Db         20 TGGGGAAGCATTAAAGGACT 1


RESULT 113
US-10-672-866-28/c
```

; Sequence 28, Application US/10672866
; Publication No. US20050019915A1
; GENERAL INFORMATION:
; APPLICANT: C. Frank Bennett
; APPLICANT: Kenneth Dobie
; TITLE OF INVENTION: ANTISENSE MODULATION OF SUPEROXIDE DISMUTASE 1,
; TITLE OF INVENTION: SOLUBLE
; TITLE OF INVENTION: EXPRESSION
; FILE REFERENCE: RTS-0242
; CURRENT APPLICATION NUMBER: US/10/672,866
; CURRENT FILING DATE: 2003-09-26
; PRIOR APPLICATION NUMBER: 10/633,843
; PRIOR FILING DATE: 2003-08-04
; PRIOR APPLICATION NUMBER: 09/888,360
; PRIOR FILING DATE: 2001-06-21
; NUMBER OF SEQ ID NOS: 339
; SEQ ID NO 28
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-10-672-866-28

Query Match 2.3%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 79;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 173 AAAGGACTGACTGAAGGCCT 192
||||||||||||||||||||
Db 20 AAAGGACTGACTGAAGGCCT 1

RESULT 114
US-10-672-866-29/c
; Sequence 29, Application US/10672866
; Publication No. US20050019915A1
; GENERAL INFORMATION:
; APPLICANT: C. Frank Bennett
; APPLICANT: Kenneth Dobie
; TITLE OF INVENTION: ANTISENSE MODULATION OF SUPEROXIDE DISMUTASE 1,
; TITLE OF INVENTION: SOLUBLE
; TITLE OF INVENTION: EXPRESSION
; FILE REFERENCE: RTS-0242
; CURRENT APPLICATION NUMBER: US/10/672,866
; CURRENT FILING DATE: 2003-09-26
; PRIOR APPLICATION NUMBER: 10/633,843
; PRIOR FILING DATE: 2003-08-04
; PRIOR APPLICATION NUMBER: 09/888;360
; PRIOR FILING DATE: 2001-06-21
; NUMBER OF SEQ ID NOS: 339
; SEQ ID NO 29
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-10-672-866-29

Query Match 2.3%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 79;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 174 AAGGACTGACTGAAGGCCTG 193
||||||||||||||||||||
Db 20 AAGGACTGACTGAAGGCCTG 1

RESULT 115
US-10-672-866-30/c
; Sequence 30, Application US/10672866
; Publication No. US20050019915A1
; GENERAL INFORMATION:
; APPLICANT: C. Frank Bennett
; APPLICANT: Kenneth Dobie
; TITLE OF INVENTION: ANTISENSE MODULATION OF SUPEROXIDE DISMUTASE 1,
; TITLE OF INVENTION: SOLUBLE
; TITLE OF INVENTION: EXPRESSION
; FILE REFERENCE: RTS-0242
; CURRENT APPLICATION NUMBER: US/10/672,866
; CURRENT FILING DATE: 2003-09-26
; PRIOR APPLICATION NUMBER: 10/633,843
; PRIOR FILING DATE: 2003-08-04
; PRIOR APPLICATION NUMBER: 09/888,360
; PRIOR FILING DATE: 2001-06-21
; NUMBER OF SEQ ID NOS: 339
; SEQ ID NO 30
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-10-672-866-30

Query Match 2.3%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 79;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 205 TGTTCATGAGTTTGGAGATA 224
||||||||||||||||||||
Db 20 TGTTCATGAGTTTGGAGATA 1

RESULT 116
US-10-672-866-31/c
; Sequence 31, Application US/10672866
; Publication No. US20050019915A1
; GENERAL INFORMATION:
; APPLICANT: C. Frank Bennett
; APPLICANT: Kenneth Dobie
; TITLE OF INVENTION: ANTISENSE MODULATION OF SUPEROXIDE DISMUTASE 1,
; TITLE OF INVENTION: SOLUBLE
; TITLE OF INVENTION: EXPRESSION
; FILE REFERENCE: RTS-0242
; CURRENT APPLICATION NUMBER: US/10/672,866
; CURRENT FILING DATE: 2003-09-26
; PRIOR APPLICATION NUMBER: 10/633,843
; PRIOR FILING DATE: 2003-08-04
; PRIOR APPLICATION NUMBER: 09/888,360
; PRIOR FILING DATE: 2001-06-21
; NUMBER OF SEQ ID NOS: 339
; SEQ ID NO 31
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-10-672-866-31

Query Match 2.3%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 79;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 212 GAGTTTGGAGATAATACAGC 231
||||||||||||||||||||
Db 20 GAGTTTGGAGATAATACAGC 1

RESULT 117
US-10-672-866-32/c
; Sequence 32, Application US/10672866
; Publication No. US20050019915A1
; GENERAL INFORMATION:
; APPLICANT: C. Frank Bennett
; APPLICANT: Kenneth Dobie
; TITLE OF INVENTION: ANTISENSE MODULATION OF SUPEROXIDE DISMUTASE 1,

```
;  TITLE OF INVENTION:  SOLUBLE
;  TITLE OF INVENTION:  EXPRESSION
;  FILE REFERENCE: RTS-0242
;  CURRENT APPLICATION NUMBER: US/10/672,866
;  CURRENT FILING DATE:  2003-09-26
;  PRIOR APPLICATION NUMBER: 10/633,843
;  PRIOR FILING DATE: 2003-08-04
;  PRIOR APPLICATION NUMBER: 09/888,360
;  PRIOR FILING DATE: 2001-06-21
;  NUMBER OF SEQ ID NOS: 339
; SEQ ID NO 32
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Antisense Oligonucleotide
US-10-672-866-32

  Query Match             2.3%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 79;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        221 GATAATACAGCAGGCTGTAC 240
              ||||||||||||||||||||
Db         20 GATAATACAGCAGGCTGTAC 1


RESULT 118
US-10-672-866-33/c
; Sequence 33, Application US/10672866
; Publication No. US20050019915A1
; GENERAL INFORMATION:
;  APPLICANT: C. Frank Bennett
;  APPLICANT:  Kenneth Dobie
;  TITLE OF INVENTION: ANTISENSE MODULATION OF SUPEROXIDE DISMUTASE 1,
;  TITLE OF INVENTION:  SOLUBLE
;  TITLE OF INVENTION:  EXPRESSION
;  FILE REFERENCE: RTS-0242
;  CURRENT APPLICATION NUMBER: US/10/672,866
;  CURRENT FILING DATE:  2003-09-26
;  PRIOR APPLICATION NUMBER: 10/633,843
;  PRIOR FILING DATE: 2003-08-04
;  PRIOR APPLICATION NUMBER: 09/888,360
;  PRIOR FILING DATE: 2001-06-21
;  NUMBER OF SEQ ID NOS: 339
; SEQ ID NO 33
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Antisense Oligonucleotide
US-10-672-866-33

  Query Match             2.3%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 79;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        304 GCATGTTGGAGACTTGGGCA 323
              ||||||||||||||||||||
Db         20 GCATGTTGGAGACTTGGGCA 1


RESULT 119
US-10-672-866-34/c
; Sequence 34, Application US/10672866
; Publication No. US20050019915A1
; GENERAL INFORMATION:
;  APPLICANT: C. Frank Bennett
;  APPLICANT:  Kenneth Dobie
;  TITLE OF INVENTION: ANTISENSE MODULATION OF SUPEROXIDE DISMUTASE 1,
;  TITLE OF INVENTION:  SOLUBLE
;  TITLE OF INVENTION:  EXPRESSION
;  FILE REFERENCE: RTS-0242
;  CURRENT APPLICATION NUMBER: US/10/672,866
;  CURRENT FILING DATE:  2003-09-26
;  PRIOR APPLICATION NUMBER: 10/633,843
;  PRIOR FILING DATE: 2003-08-04
;  PRIOR APPLICATION NUMBER: 09/888,360
;  PRIOR FILING DATE: 2001-06-21
;  NUMBER OF SEQ ID NOS: 339
; SEQ ID NO 34
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Antisense Oligonucleotide
US-10-672-866-34

  Query Match             2.3%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 79;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        309 TTGGAGACTTGGGCAATGTG 328
              ||||||||||||||||||||
Db         20 TTGGAGACTTGGGCAATGTG 1


RESULT 120
US-10-672-866-35/c
; Sequence 35, Application US/10672866
; Publication No. US20050019915A1
; GENERAL INFORMATION:
;  APPLICANT: C. Frank Bennett
;  APPLICANT:  Kenneth Dobie
;  TITLE OF INVENTION: ANTISENSE MODULATION OF SUPEROXIDE DISMUTASE 1,
;  TITLE OF INVENTION:  SOLUBLE
;  TITLE OF INVENTION:  EXPRESSION
;  FILE REFERENCE: RTS-0242
;  CURRENT APPLICATION NUMBER: US/10/672,866
;  CURRENT FILING DATE:  2003-09-26
;  PRIOR APPLICATION NUMBER: 10/633,843
;  PRIOR FILING DATE: 2003-08-04
;  PRIOR APPLICATION NUMBER: 09/888,360
;  PRIOR FILING DATE: 2001-06-21
;  NUMBER OF SEQ ID NOS: 339
; SEQ ID NO 35
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Antisense Oligonucleotide
US-10-672-866-35

  Query Match             2.3%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 79;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        335 GACAAAGATGGTGTGGCCGA 354
              ||||||||||||||||||||
Db         20 GACAAAGATGGTGTGGCCGA 1


RESULT 121
US-10-672-866-36/c
; Sequence 36, Application US/10672866
; Publication No. US20050019915A1
; GENERAL INFORMATION:
;  APPLICANT: C. Frank Bennett
;  APPLICANT:  Kenneth Dobie
;  TITLE OF INVENTION: ANTISENSE MODULATION OF SUPEROXIDE DISMUTASE 1,
;  TITLE OF INVENTION:  SOLUBLE
;  TITLE OF INVENTION:  EXPRESSION
;  FILE REFERENCE: RTS-0242
;  CURRENT APPLICATION NUMBER: US/10/672,866
;  CURRENT FILING DATE:  2003-09-26
;  PRIOR APPLICATION NUMBER: 10/633,843
```

```
;  PRIOR FILING DATE: 2003-08-04
;  PRIOR APPLICATION NUMBER: 09/888,360
;  PRIOR FILING DATE: 2001-06-21
;  NUMBER OF SEQ ID NOS: 339
; SEQ ID NO 36
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Antisense Oligonucleotide
US-10-672-866-36

  Query Match             2.3%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 79;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        337 CAAAGATGGTGTGGCCGATG 356
              ||||||||||||||||||||
Db         20 CAAAGATGGTGTGGCCGATG 1


RESULT 122
US-10-672-866-37/c
; Sequence 37, Application US/10672866
; Publication No. US20050019915A1
; GENERAL INFORMATION:
;  APPLICANT: C. Frank Bennett
;  APPLICANT:  Kenneth Dobie
;  TITLE OF INVENTION: ANTISENSE MODULATION OF SUPEROXIDE DISMUTASE 1,
;  TITLE OF INVENTION:  SOLUBLE
;  TITLE OF INVENTION:  EXPRESSION
;  FILE REFERENCE: RTS-0242
;  CURRENT APPLICATION NUMBER: US/10/672,866
;  CURRENT FILING DATE:  2003-09-26
;  PRIOR APPLICATION NUMBER: 10/633,843
;  PRIOR FILING DATE: 2003-08-04
;  PRIOR APPLICATION NUMBER: 09/888,360
;  PRIOR FILING DATE: 2001-06-21
;  NUMBER OF SEQ ID NOS: 339
; SEQ ID NO 37
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Antisense Oligonucleotide
US-10-672-866-37

  Query Match             2.3%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 79;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        340 AGATGGTGTGGCCGATGTGT 359
              ||||||||||||||||||||
Db         20 AGATGGTGTGGCCGATGTGT 1


RESULT 123
US-10-672-866-38/c
; Sequence 38, Application US/10672866
; Publication No. US20050019915A1
; GENERAL INFORMATION:
;  APPLICANT: C. Frank Bennett
;  APPLICANT:  Kenneth Dobie
;  TITLE OF INVENTION: ANTISENSE MODULATION OF SUPEROXIDE DISMUTASE 1,
;  TITLE OF INVENTION:  SOLUBLE
;  TITLE OF INVENTION:  EXPRESSION
;  FILE REFERENCE: RTS-0242
;  CURRENT APPLICATION NUMBER: US/10/672,866
;  CURRENT FILING DATE:  2003-09-26
;  PRIOR APPLICATION NUMBER: 10/633,843
;  PRIOR FILING DATE: 2003-08-04
;  PRIOR APPLICATION NUMBER: 09/888,360
;  PRIOR FILING DATE: 2001-06-21
;  NUMBER OF SEQ ID NOS: 339
; SEQ ID NO 38
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Antisense Oligonucleotide
US-10-672-866-38

  Query Match             2.3%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 79;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        343 TGGTGTGGCCGATGTGTCTA 362
              ||||||||||||||||||||
Db         20 TGGTGTGGCCGATGTGTCTA 1


RESULT 124
US-10-672-866-39/c
; Sequence 39, Application US/10672866
; Publication No. US20050019915A1
; GENERAL INFORMATION:
;  APPLICANT: C. Frank Bennett
;  APPLICANT:  Kenneth Dobie
;  TITLE OF INVENTION: ANTISENSE MODULATION OF SUPEROXIDE DISMUTASE 1,
;  TITLE OF INVENTION:  SOLUBLE
;  TITLE OF INVENTION:  EXPRESSION
;  FILE REFERENCE: RTS-0242
;  CURRENT APPLICATION NUMBER: US/10/672,866
;  CURRENT FILING DATE:  2003-09-26
;  PRIOR APPLICATION NUMBER: 10/633,843
;  PRIOR FILING DATE: 2003-08-04
;  PRIOR APPLICATION NUMBER: 09/888,360
;  PRIOR FILING DATE: 2001-06-21
;  NUMBER OF SEQ ID NOS: 339
; SEQ ID NO 39
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Antisense Oligonucleotide
US-10-672-866-39

  Query Match             2.3%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 79;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        404 ATTGGCCGCACACTGGTGGT 423
              ||||||||||||||||||||
Db         20 ATTGGCCGCACACTGGTGGT 1


RESULT 125
US-10-672-866-40/c
; Sequence 40, Application US/10672866
; Publication No. US20050019915A1
; GENERAL INFORMATION:
;  APPLICANT: C. Frank Bennett
;  APPLICANT:  Kenneth Dobie
;  TITLE OF INVENTION: ANTISENSE MODULATION OF SUPEROXIDE DISMUTASE 1,
;  TITLE OF INVENTION:  SOLUBLE
;  TITLE OF INVENTION:  EXPRESSION
;  FILE REFERENCE: RTS-0242
;  CURRENT APPLICATION NUMBER: US/10/672,866
;  CURRENT FILING DATE:  2003-09-26
;  PRIOR APPLICATION NUMBER: 10/633,843
;  PRIOR FILING DATE: 2003-08-04
;  PRIOR APPLICATION NUMBER: 09/888,360
;  PRIOR FILING DATE: 2001-06-21
;  NUMBER OF SEQ ID NOS: 339
; SEQ ID NO 40
;   LENGTH: 20
```

```
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Antisense Oligonucleotide
US-10-672-866-40

  Query Match             2.3%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 79;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        409 CCGCACACTGGTGGTCCATG 428
              ||||||||||||||||||||
Db         20 CCGCACACTGGTGGTCCATG 1


RESULT 126
US-10-672-866-41/c
; Sequence 41, Application US/10672866
; Publication No. US20050019915A1
; GENERAL INFORMATION:
;  APPLICANT: C. Frank Bennett
;  APPLICANT:  Kenneth Dobie
;  TITLE OF INVENTION: ANTISENSE MODULATION OF SUPEROXIDE DISMUTASE 1,
;  TITLE OF INVENTION:  SOLUBLE
;  TITLE OF INVENTION:  EXPRESSION
;  FILE REFERENCE: RTS-0242
;  CURRENT APPLICATION NUMBER: US/10/672,866
;  CURRENT FILING DATE:  2003-09-26
;  PRIOR APPLICATION NUMBER: 10/633,843
;  PRIOR FILING DATE: 2003-08-04
;  PRIOR APPLICATION NUMBER: 09/888,360
;  PRIOR FILING DATE: 2001-06-21
;  NUMBER OF SEQ ID NOS: 339
; SEQ ID NO 41
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Antisense Oligonucleotide
US-10-672-866-41

  Query Match             2.3%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 79;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        410 CGCACACTGGTGGTCCATGA 429
              ||||||||||||||||||||
Db         20 CGCACACTGGTGGTCCATGA 1


RESULT 127
US-10-672-866-42/c
; Sequence 42, Application US/10672866
; Publication No. US20050019915A1
; GENERAL INFORMATION:
;  APPLICANT: C. Frank Bennett
;  APPLICANT:  Kenneth Dobie
;  TITLE OF INVENTION: ANTISENSE MODULATION OF SUPEROXIDE DISMUTASE 1,
;  TITLE OF INVENTION:  SOLUBLE
;  TITLE OF INVENTION:  EXPRESSION
;  FILE REFERENCE: RTS-0242
;  CURRENT APPLICATION NUMBER: US/10/672,866
;  CURRENT FILING DATE:  2003-09-26
;  PRIOR APPLICATION NUMBER: 10/633,843
;  PRIOR FILING DATE: 2003-08-04
;  PRIOR APPLICATION NUMBER: 09/888,360
;  PRIOR FILING DATE: 2001-06-21
;  NUMBER OF SEQ ID NOS: 339
; SEQ ID NO 42
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Antisense Oligonucleotide
US-10-672-866-42

  Query Match             2.3%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 79;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        504 GTGGTGTAATTGGGATCGCC 523
              ||||||||||||||||||||
Db         20 GTGGTGTAATTGGGATCGCC 1


RESULT 128
US-10-672-866-43/c
; Sequence 43, Application US/10672866
; Publication No. US20050019915A1
; GENERAL INFORMATION:
;  APPLICANT: C. Frank Bennett
;  APPLICANT:  Kenneth Dobie
;  TITLE OF INVENTION: ANTISENSE MODULATION OF SUPEROXIDE DISMUTASE 1,
;  TITLE OF INVENTION:  SOLUBLE
;  TITLE OF INVENTION:  EXPRESSION
;  FILE REFERENCE: RTS-0242
;  CURRENT APPLICATION NUMBER: US/10/672,866
;  CURRENT FILING DATE:  2003-09-26
;  PRIOR APPLICATION NUMBER: 10/633,843
;  PRIOR FILING DATE: 2003-08-04
;  PRIOR APPLICATION NUMBER: 09/888,360
;  PRIOR FILING DATE: 2001-06-21
;  NUMBER OF SEQ ID NOS: 339
; SEQ ID NO 43
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Antisense Oligonucleotide
US-10-672-866-43

  Query Match             2.3%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 79;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        517 GATCGCCCAATAAACATTCC 536
              ||||||||||||||||||||
Db         20 GATCGCCCAATAAACATTCC 1


RESULT 129
US-10-672-866-44/c
; Sequence 44, Application US/10672866
; Publication No. US20050019915A1
; GENERAL INFORMATION:
;  APPLICANT: C. Frank Bennett
;  APPLICANT:  Kenneth Dobie
;  TITLE OF INVENTION: ANTISENSE MODULATION OF SUPEROXIDE DISMUTASE 1,
;  TITLE OF INVENTION:  SOLUBLE
;  TITLE OF INVENTION:  EXPRESSION
;  FILE REFERENCE: RTS-0242
;  CURRENT APPLICATION NUMBER: US/10/672,866
;  CURRENT FILING DATE:  2003-09-26
;  PRIOR APPLICATION NUMBER: 10/633,843
;  PRIOR FILING DATE: 2003-08-04
;  PRIOR APPLICATION NUMBER: 09/888,360
;  PRIOR FILING DATE: 2001-06-21
;  NUMBER OF SEQ ID NOS: 339
; SEQ ID NO 44
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Antisense Oligonucleotide
US-10-672-866-44
```

```
  Query Match             2.3%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 79;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        535 CCCTTGGATGTAGTCTGAGG 554
              ||||||||||||||||||||
Db         20 CCCTTGGATGTAGTCTGAGG 1


RESULT 130
US-10-672-866-45/c
; Sequence 45, Application US/10672866
; Publication No. US20050019915A1
; GENERAL INFORMATION:
;  APPLICANT: C. Frank Bennett
;  APPLICANT:  Kenneth Dobie
;  TITLE OF INVENTION: ANTISENSE MODULATION OF SUPEROXIDE DISMUTASE 1,
;  TITLE OF INVENTION:  SOLUBLE
;  TITLE OF INVENTION:  EXPRESSION
;  FILE REFERENCE: RTS-0242
;  CURRENT APPLICATION NUMBER: US/10/672,866
;  CURRENT FILING DATE:  2003-09-26
;  PRIOR APPLICATION NUMBER: 10/633,843
;  PRIOR FILING DATE: 2003-08-04
;  PRIOR APPLICATION NUMBER: 09/888,360
;  PRIOR FILING DATE: 2001-06-21
;  NUMBER OF SEQ ID NOS: 339
; SEQ ID NO 45
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Antisense Oligonucleotide
US-10-672-866-45

  Query Match             2.3%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 79;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        556 CCCTTAACTCATCTGTTATC 575
              ||||||||||||||||||||
Db         20 CCCTTAACTCATCTGTTATC 1


RESULT 131
US-10-672-866-46/c
; Sequence 46, Application US/10672866
; Publication No. US20050019915A1
; GENERAL INFORMATION:
;  APPLICANT: C. Frank Bennett
;  APPLICANT:  Kenneth Dobie
;  TITLE OF INVENTION: ANTISENSE MODULATION OF SUPEROXIDE DISMUTASE 1,
;  TITLE OF INVENTION:  SOLUBLE
;  TITLE OF INVENTION:  EXPRESSION
;  FILE REFERENCE: RTS-0242
;  CURRENT APPLICATION NUMBER: US/10/672,866
;  CURRENT FILING DATE:  2003-09-26
;  PRIOR APPLICATION NUMBER: 10/633,843
;  PRIOR FILING DATE: 2003-08-04
;  PRIOR APPLICATION NUMBER: 09/888,360
;  PRIOR FILING DATE: 2001-06-21
;  NUMBER OF SEQ ID NOS: 339
; SEQ ID NO 46
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Antisense Oligonucleotide
US-10-672-866-46

  Query Match             2.3%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 79;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        620 ATCTTAAAAGTGTAATTGTG 639
              ||||||||||||||||||||
Db         20 ATCTTAAAAGTGTAATTGTG 1


RESULT 132
US-10-672-866-47/c
; Sequence 47, Application US/10672866
; Publication No. US20050019915A1
; GENERAL INFORMATION:
;  APPLICANT: C. Frank Bennett
;  APPLICANT:  Kenneth Dobie
;  TITLE OF INVENTION: ANTISENSE MODULATION OF SUPEROXIDE DISMUTASE 1,
;  TITLE OF INVENTION:  SOLUBLE
;  TITLE OF INVENTION:  EXPRESSION
;  FILE REFERENCE: RTS-0242
;  CURRENT APPLICATION NUMBER: US/10/672,866
;  CURRENT FILING DATE:  2003-09-26
;  PRIOR APPLICATION NUMBER: 10/633,843
;  PRIOR FILING DATE: 2003-08-04
;  PRIOR APPLICATION NUMBER: 09/888,360
;  PRIOR FILING DATE: 2001-06-21
;  NUMBER OF SEQ ID NOS: 339
; SEQ ID NO 47
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Antisense Oligonucleotide
US-10-672-866-47

  Query Match             2.3%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 79;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        625 AAAAGTGTAATTGTGTGACT 644
              ||||||||||||||||||||
Db         20 AAAAGTGTAATTGTGTGACT 1


RESULT 133
US-10-672-866-48/c
; Sequence 48, Application US/10672866
; Publication No. US20050019915A1
; GENERAL INFORMATION:
;  APPLICANT: C. Frank Bennett
;  APPLICANT:  Kenneth Dobie
;  TITLE OF INVENTION: ANTISENSE MODULATION OF SUPEROXIDE DISMUTASE 1,
;  TITLE OF INVENTION:  SOLUBLE
;  TITLE OF INVENTION:  EXPRESSION
;  FILE REFERENCE: RTS-0242
;  CURRENT APPLICATION NUMBER: US/10/672,866
;  CURRENT FILING DATE:  2003-09-26
;  PRIOR APPLICATION NUMBER: 10/633,843
;  PRIOR FILING DATE: 2003-08-04
;  PRIOR APPLICATION NUMBER: 09/888,360
;  PRIOR FILING DATE: 2001-06-21
;  NUMBER OF SEQ ID NOS: 339
; SEQ ID NO 48
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Antisense Oligonucleotide
US-10-672-866-48

  Query Match             2.3%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 79;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        658 TTTAAAGTACCTGTAGTGAG 677
              ||||||||||||||||||||
```

```
Db         20 TTTAAAGTACCTGTAGTGAG 1


RESULT 134
US-10-672-866-49/c
; Sequence 49, Application US/10672866
; Publication No. US20050019915A1
; GENERAL INFORMATION:
;  APPLICANT: C. Frank Bennett
;  APPLICANT:  Kenneth Dobie
;  TITLE OF INVENTION: ANTISENSE MODULATION OF SUPEROXIDE DISMUTASE 1,
;  TITLE OF INVENTION:  SOLUBLE
;  TITLE OF INVENTION:  EXPRESSION
;  FILE REFERENCE: RTS-0242
;  CURRENT APPLICATION NUMBER: US/10/672,866
;  CURRENT FILING DATE:  2003-09-26
;  PRIOR APPLICATION NUMBER: 10/633,843
;  PRIOR FILING DATE: 2003-08-04
;  PRIOR APPLICATION NUMBER: 09/888,360
;  PRIOR FILING DATE: 2001-06-21
;  NUMBER OF SEQ ID NOS: 339
; SEQ ID NO 49
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Antisense Oligonucleotide
US-10-672-866-49

  Query Match             2.3%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 79;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        667 CCTGTAGTGAGAAACTGATT 686
              ||||||||||||||||||||
Db         20 CCTGTAGTGAGAAACTGATT 1


RESULT 135
US-10-672-866-50/c
; Sequence 50, Application US/10672866
; Publication No. US20050019915A1
; GENERAL INFORMATION:
;  APPLICANT: C. Frank Bennett
;  APPLICANT:  Kenneth Dobie
;  TITLE OF INVENTION: ANTISENSE MODULATION OF SUPEROXIDE DISMUTASE 1,
;  TITLE OF INVENTION:  SOLUBLE
;  TITLE OF INVENTION:  EXPRESSION
;  FILE REFERENCE: RTS-0242
;  CURRENT APPLICATION NUMBER: US/10/672,866
;  CURRENT FILING DATE:  2003-09-26
;  PRIOR APPLICATION NUMBER: 10/633,843
;  PRIOR FILING DATE: 2003-08-04
;  PRIOR APPLICATION NUMBER: 09/888,360
;  PRIOR FILING DATE: 2001-06-21
;  NUMBER OF SEQ ID NOS: 339
; SEQ ID NO 50
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Antisense Oligonucleotide
US-10-672-866-50

  Query Match             2.3%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 79;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        670 GTAGTGAGAAACTGATTTAT 689
              ||||||||||||||||||||
Db         20 GTAGTGAGAAACTGATTTAT 1


RESULT 136
US-10-672-866-51/c
; Sequence 51, Application US/10672866
; Publication No. US20050019915A1
; GENERAL INFORMATION:
;  APPLICANT: C. Frank Bennett
;  APPLICANT:  Kenneth Dobie
;  TITLE OF INVENTION: ANTISENSE MODULATION OF SUPEROXIDE DISMUTASE 1,
;  TITLE OF INVENTION:  SOLUBLE
;  TITLE OF INVENTION:  EXPRESSION
;  FILE REFERENCE: RTS-0242
;  CURRENT APPLICATION NUMBER: US/10/672,866
;  CURRENT FILING DATE:  2003-09-26
;  PRIOR APPLICATION NUMBER: 10/633,843
;  PRIOR FILING DATE: 2003-08-04
;  PRIOR APPLICATION NUMBER: 09/888,360
;  PRIOR FILING DATE: 2001-06-21
;  NUMBER OF SEQ ID NOS: 339
; SEQ ID NO 51
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Antisense Oligonucleotide
US-10-672-866-51

  Query Match             2.3%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 79;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        671 TAGTGAGAAACTGATTTATG 690
              ||||||||||||||||||||
Db         20 TAGTGAGAAACTGATTTATG 1


RESULT 137
US-10-672-866-52/c
; Sequence 52, Application US/10672866
; Publication No. US20050019915A1
; GENERAL INFORMATION:
;  APPLICANT: C. Frank Bennett
;  APPLICANT:  Kenneth Dobie
;  TITLE OF INVENTION: ANTISENSE MODULATION OF SUPEROXIDE DISMUTASE 1,
;  TITLE OF INVENTION:  SOLUBLE
;  TITLE OF INVENTION:  EXPRESSION
;  FILE REFERENCE: RTS-0242
;  CURRENT APPLICATION NUMBER: US/10/672,866
;  CURRENT FILING DATE:  2003-09-26
;  PRIOR APPLICATION NUMBER: 10/633,843
;  PRIOR FILING DATE: 2003-08-04
;  PRIOR APPLICATION NUMBER: 09/888,360
;  PRIOR FILING DATE: 2001-06-21
;  NUMBER OF SEQ ID NOS: 339
; SEQ ID NO 52
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Antisense Oligonucleotide
US-10-672-866-52

  Query Match             2.3%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 79;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        686 TTATGATCACTTGGAAGATT 705
              ||||||||||||||||||||
Db         20 TTATGATCACTTGGAAGATT 1


RESULT 138
US-10-672-866-53/c
; Sequence 53, Application US/10672866
```

; Publication No. US20050019915A1
; GENERAL INFORMATION:
; APPLICANT: C. Frank Bennett
; APPLICANT: Kenneth Dobie
; TITLE OF INVENTION: ANTISENSE MODULATION OF SUPEROXIDE DISMUTASE 1,
; TITLE OF INVENTION: SOLUBLE
; TITLE OF INVENTION: EXPRESSION
; FILE REFERENCE: RTS-0242
; CURRENT APPLICATION NUMBER: US/10/672,866
; CURRENT FILING DATE: 2003-09-26
; PRIOR APPLICATION NUMBER: 10/633,843
; PRIOR FILING DATE: 2003-08-04
; PRIOR APPLICATION NUMBER: 09/888,360
; PRIOR FILING DATE: 2001-06-21
; NUMBER OF SEQ ID NOS: 339
; SEQ ID NO 53
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-10-672-866-53

Query Match 2.3%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 79;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 691 ATCACTTGGAAGATTTGTAT 710
||||||||||||||||||||
Db 20 ATCACTTGGAAGATTTGTAT 1

RESULT 139
US-10-672-866-54/c
; Sequence 54, Application US/10672866
; Publication No. US20050019915A1
; GENERAL INFORMATION:
; APPLICANT: C. Frank Bennett
; APPLICANT: Kenneth Dobie
; TITLE OF INVENTION: ANTISENSE MODULATION OF SUPEROXIDE DISMUTASE 1,
; TITLE OF INVENTION: SOLUBLE
; TITLE OF INVENTION: EXPRESSION
; FILE REFERENCE: RTS-0242
; CURRENT APPLICATION NUMBER: US/10/672,866
; CURRENT FILING DATE: 2003-09-26
; PRIOR APPLICATION NUMBER: 10/633,843
; PRIOR FILING DATE: 2003-08-04
; PRIOR APPLICATION NUMBER: 09/888,360
; PRIOR FILING DATE: 2001-06-21
; NUMBER OF SEQ ID NOS: 339
; SEQ ID NO 54
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-10-672-866-54

Query Match 2.3%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 79;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 707 GTATAGTTTTATAAAACTCA 726
||||||||||||||||||||
Db 20 GTATAGTTTTATAAAACTCA 1

RESULT 140
US-10-672-866-55/c
; Sequence 55, Application US/10672866
; Publication No. US20050019915A1
; GENERAL INFORMATION:
; APPLICANT: C. Frank Bennett
; APPLICANT: Kenneth Dobie
; TITLE OF INVENTION: ANTISENSE MODULATION OF SUPEROXIDE DISMUTASE 1,
; TITLE OF INVENTION: SOLUBLE
; TITLE OF INVENTION: EXPRESSION
; FILE REFERENCE: RTS-0242
; CURRENT APPLICATION NUMBER: US/10/672,866
; CURRENT FILING DATE: 2003-09-26
; PRIOR APPLICATION NUMBER: 10/633,843
; PRIOR FILING DATE: 2003-08-04
; PRIOR APPLICATION NUMBER: 09/888,360
; PRIOR FILING DATE: 2001-06-21
; NUMBER OF SEQ ID NOS: 339
; SEQ ID NO 55
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-10-672-866-55

Query Match 2.3%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 79;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 710 TAGTTTTATAAAACTCAGTT 729
||||||||||||||||||||
Db 20 TAGTTTTATAAAACTCAGTT 1

RESULT 141
US-10-672-866-56/c
; Sequence 56, Application US/10672866
; Publication No. US20050019915A1
; GENERAL INFORMATION:
; APPLICANT: C. Frank Bennett
; APPLICANT: Kenneth Dobie
; TITLE OF INVENTION: ANTISENSE MODULATION OF SUPEROXIDE DISMUTASE 1,
; TITLE OF INVENTION: SOLUBLE
; TITLE OF INVENTION: EXPRESSION
; FILE REFERENCE: RTS-0242
; CURRENT APPLICATION NUMBER: US/10/672,866
; CURRENT FILING DATE: 2003-09-26
; PRIOR APPLICATION NUMBER: 10/633,843
; PRIOR FILING DATE: 2003-08-04
; PRIOR APPLICATION NUMBER: 09/888,360
; PRIOR FILING DATE: 2001-06-21
; NUMBER OF SEQ ID NOS: 339
; SEQ ID NO 56
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-10-672-866-56

Query Match 2.3%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 79;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 721 AACTCAGTTAAAATGTCTGT 740
||||||||||||||||||||
Db 20 AACTCAGTTAAAATGTCTGT 1

RESULT 142
US-10-672-866-57/c
; Sequence 57, Application US/10672866
; Publication No. US20050019915A1
; GENERAL INFORMATION:
; APPLICANT: C. Frank Bennett
; APPLICANT: Kenneth Dobie
; TITLE OF INVENTION: ANTISENSE MODULATION OF SUPEROXIDE DISMUTASE 1,
; TITLE OF INVENTION: SOLUBLE

; TITLE OF INVENTION: EXPRESSION
; FILE REFERENCE: RTS-0242
; CURRENT APPLICATION NUMBER: US/10/672,866
; CURRENT FILING DATE: 2003-09-26
; PRIOR APPLICATION NUMBER: 10/633,843
; PRIOR FILING DATE: 2003-08-04
; PRIOR APPLICATION NUMBER: 09/888,360
; PRIOR FILING DATE: 2001-06-21
; NUMBER OF SEQ ID NOS: 339
; SEQ ID NO 57
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-10-672-866-57

Query Match 2.3%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 79;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 727 GTTAAAATGTCTGTTTCAAT 746
||||||||||||||||||||
Db 20 GTTAAAATGTCTGTTTCAAT 1

RESULT 143
US-10-672-866-58/c
; Sequence 58, Application US/10672866
; Publication No. US20050019915A1
; GENERAL INFORMATION:
; APPLICANT: C. Frank Bennett
; APPLICANT: Kenneth Dobie
; TITLE OF INVENTION: ANTISENSE MODULATION OF SUPEROXIDE DISMUTASE 1,
; TITLE OF INVENTION: SOLUBLE
; TITLE OF INVENTION: EXPRESSION
; FILE REFERENCE: RTS-0242
; CURRENT APPLICATION NUMBER: US/10/672,866
; CURRENT FILING DATE: 2003-09-26
; PRIOR APPLICATION NUMBER: 10/633,843
; PRIOR FILING DATE: 2003-08-04
; PRIOR APPLICATION NUMBER: 09/888,360
; PRIOR FILING DATE: 2001-06-21
; NUMBER OF SEQ ID NOS: 339
; SEQ ID NO 58
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-10-672-866-58

Query Match 2.3%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 79;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 729 TAAAATGTCTGTTTCAATGA 748
||||||||||||||||||||
Db 20 TAAAATGTCTGTTTCAATGA 1

RESULT 144
US-10-672-866-59/c
; Sequence 59, Application US/10672866
; Publication No. US20050019915A1
; GENERAL INFORMATION:
; APPLICANT: C. Frank Bennett
; APPLICANT: Kenneth Dobie
; TITLE OF INVENTION: ANTISENSE MODULATION OF SUPEROXIDE DISMUTASE 1,
; TITLE OF INVENTION: SOLUBLE
; TITLE OF INVENTION: EXPRESSION
; FILE REFERENCE: RTS-0242
; CURRENT APPLICATION NUMBER: US/10/672,866
; CURRENT FILING DATE: 2003-09-26
; PRIOR APPLICATION NUMBER: 10/633,843
; PRIOR FILING DATE: 2003-08-04
; PRIOR APPLICATION NUMBER: 09/888,360
; PRIOR FILING DATE: 2001-06-21
; NUMBER OF SEQ ID NOS: 339
; SEQ ID NO 59
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-10-672-866-59

Query Match 2.3%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 79;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 736 TCTGTTTCAATGACCTGTAT 755
||||||||||||||||||||
Db 20 TCTGTTTCAATGACCTGTAT 1

RESULT 145
US-10-672-866-60/c
; Sequence 60, Application US/10672866
; Publication No. US20050019915A1
; GENERAL INFORMATION:
; APPLICANT: C. Frank Bennett
; APPLICANT: Kenneth Dobie
; TITLE OF INVENTION: ANTISENSE MODULATION OF SUPEROXIDE DISMUTASE 1,
; TITLE OF INVENTION: SOLUBLE
; TITLE OF INVENTION: EXPRESSION
; FILE REFERENCE: RTS-0242
; CURRENT APPLICATION NUMBER: US/10/672,866
; CURRENT FILING DATE: 2003-09-26
; PRIOR APPLICATION NUMBER: 10/633,843
; PRIOR FILING DATE: 2003-08-04
; PRIOR APPLICATION NUMBER: 09/888,360
; PRIOR FILING DATE: 2001-06-21
; NUMBER OF SEQ ID NOS: 339
; SEQ ID NO 60
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-10-672-866-60

Query Match 2.3%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 79;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 761 CAGACTTAAATCACAGATGG 780
||||||||||||||||||||
Db 20 CAGACTTAAATCACAGATGG 1

RESULT 146
US-10-672-866-61/c
; Sequence 61, Application US/10672866
; Publication No. US20050019915A1
; GENERAL INFORMATION:
; APPLICANT: C. Frank Bennett
; APPLICANT: Kenneth Dobie
; TITLE OF INVENTION: ANTISENSE MODULATION OF SUPEROXIDE DISMUTASE 1,
; TITLE OF INVENTION: SOLUBLE
; TITLE OF INVENTION: EXPRESSION
; FILE REFERENCE: RTS-0242
; CURRENT APPLICATION NUMBER: US/10/672,866
; CURRENT FILING DATE: 2003-09-26
; PRIOR APPLICATION NUMBER: 10/633,843
; PRIOR FILING DATE: 2003-08-04

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;  PRIOR APPLICATION NUMBER: 09/888,360
;  PRIOR FILING DATE: 2001-06-21
;  NUMBER OF SEQ ID NOS: 339
; SEQ ID NO 61
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Antisense Oligonucleotide
US-10-672-866-61

  Query Match             2.3%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 79;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        769 AATCACAGATGGGTATTAAA 788
              ||||||||||||||||||||
Db         20 AATCACAGATGGGTATTAAA 1


RESULT 147
US-10-672-866-62/c
; Sequence 62, Application US/10672866
; Publication No. US20050019915A1
; GENERAL INFORMATION:
;  APPLICANT: C. Frank Bennett
;  APPLICANT:  Kenneth Dobie
;  TITLE OF INVENTION: ANTISENSE MODULATION OF SUPEROXIDE DISMUTASE 1,
;  TITLE OF INVENTION:  SOLUBLE
;  TITLE OF INVENTION:  EXPRESSION
;  FILE REFERENCE: RTS-0242
;  CURRENT APPLICATION NUMBER: US/10/672,866
;  CURRENT FILING DATE:  2003-09-26
;  PRIOR APPLICATION NUMBER: 10/633,843
;  PRIOR FILING DATE: 2003-08-04
;  PRIOR APPLICATION NUMBER: 09/888,360
;  PRIOR FILING DATE: 2001-06-21
;  NUMBER OF SEQ ID NOS: 339
; SEQ ID NO 62
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Antisense Oligonucleotide
US-10-672-866-62

  Query Match             2.3%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 79;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        771 TCACAGATGGGTATTAAACT 790
              ||||||||||||||||||||
Db         20 TCACAGATGGGTATTAAACT 1


RESULT 148
US-10-672-866-63/c
; Sequence 63, Application US/10672866
; Publication No. US20050019915A1
; GENERAL INFORMATION:
;  APPLICANT: C. Frank Bennett
;  APPLICANT:  Kenneth Dobie
;  TITLE OF INVENTION: ANTISENSE MODULATION OF SUPEROXIDE DISMUTASE 1,
;  TITLE OF INVENTION:  SOLUBLE
;  TITLE OF INVENTION:  EXPRESSION
;  FILE REFERENCE: RTS-0242
;  CURRENT APPLICATION NUMBER: US/10/672,866
;  CURRENT FILING DATE:  2003-09-26
;  PRIOR APPLICATION NUMBER: 10/633,843
;  PRIOR FILING DATE: 2003-08-04
;  PRIOR APPLICATION NUMBER: 09/888,360
;  PRIOR FILING DATE: 2001-06-21
;  NUMBER OF SEQ ID NOS: 339
; SEQ ID NO 63
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Antisense Oligonucleotide
US-10-672-866-63

  Query Match             2.3%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 79;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        787 AACTTGTCAGAATTTCTTTG 806
              ||||||||||||||||||||
Db         20 AACTTGTCAGAATTTCTTTG 1


RESULT 149
US-10-672-866-64/c
; Sequence 64, Application US/10672866
; Publication No. US20050019915A1
; GENERAL INFORMATION:
;  APPLICANT: C. Frank Bennett
;  APPLICANT:  Kenneth Dobie
;  TITLE OF INVENTION: ANTISENSE MODULATION OF SUPEROXIDE DISMUTASE 1,
;  TITLE OF INVENTION:  SOLUBLE
;  TITLE OF INVENTION:  EXPRESSION
;  FILE REFERENCE: RTS-0242
;  CURRENT APPLICATION NUMBER: US/10/672,866
;  CURRENT FILING DATE:  2003-09-26
;  PRIOR APPLICATION NUMBER: 10/633,843
;  PRIOR FILING DATE: 2003-08-04
;  PRIOR APPLICATION NUMBER: 09/888,360
;  PRIOR FILING DATE: 2001-06-21
;  NUMBER OF SEQ ID NOS: 339
; SEQ ID NO 64
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Antisense Oligonucleotide
US-10-672-866-64

  Query Match             2.3%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 79;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        795 AGAATTTCTTTGTCATTCAA 814
              ||||||||||||||||||||
Db         20 AGAATTTCTTTGTCATTCAA 1


RESULT 150
US-10-672-866-65/c
; Sequence 65, Application US/10672866
; Publication No. US20050019915A1
; GENERAL INFORMATION:
;  APPLICANT: C. Frank Bennett
;  APPLICANT:  Kenneth Dobie
;  TITLE OF INVENTION: ANTISENSE MODULATION OF SUPEROXIDE DISMUTASE 1,
;  TITLE OF INVENTION:  SOLUBLE
;  TITLE OF INVENTION:  EXPRESSION
;  FILE REFERENCE: RTS-0242
;  CURRENT APPLICATION NUMBER: US/10/672,866
;  CURRENT FILING DATE:  2003-09-26
;  PRIOR APPLICATION NUMBER: 10/633,843
;  PRIOR FILING DATE: 2003-08-04
;  PRIOR APPLICATION NUMBER: 09/888,360
;  PRIOR FILING DATE: 2001-06-21
;  NUMBER OF SEQ ID NOS: 339
; SEQ ID NO 65
;   LENGTH: 20
;   TYPE: DNA
```

; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-10-672-866-65

Query Match 2.3%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 79;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 801 TCTTTGTCATTCAAGCCTGT 820
||||||||||||||||||||
Db 20 TCTTTGTCATTCAAGCCTGT 1

RESULT 151
US-10-672-866-66/c
; Sequence 66, Application US/10672866
; Publication No. US20050019915A1
; GENERAL INFORMATION:
; APPLICANT: C. Frank Bennett
; APPLICANT: Kenneth Dobie
; TITLE OF INVENTION: ANTISENSE MODULATION OF SUPEROXIDE DISMUTASE 1,
; TITLE OF INVENTION: SOLUBLE
; TITLE OF INVENTION: EXPRESSION
; FILE REFERENCE: RTS-0242
; CURRENT APPLICATION NUMBER: US/10/672,866
; CURRENT FILING DATE: 2003-09-26
; PRIOR APPLICATION NUMBER: 10/633,843
; PRIOR FILING DATE: 2003-08-04
; PRIOR APPLICATION NUMBER: 09/888,360
; PRIOR FILING DATE: 2001-06-21
; NUMBER OF SEQ ID NOS: 339
; SEQ ID NO 66
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-10-672-866-66

Query Match 2.3%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 79;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 805 TGTCATTCAAGCCTGTGAAT 824
||||||||||||||||||||
Db 20 TGTCATTCAAGCCTGTGAAT 1

RESULT 152
US-10-672-866-67/c
; Sequence 67, Application US/10672866
; Publication No. US20050019915A1
; GENERAL INFORMATION:
; APPLICANT: C. Frank Bennett
; APPLICANT: Kenneth Dobie
; TITLE OF INVENTION: ANTISENSE MODULATION OF SUPEROXIDE DISMUTASE 1,
; TITLE OF INVENTION: SOLUBLE
; TITLE OF INVENTION: EXPRESSION
; FILE REFERENCE: RTS-0242
; CURRENT APPLICATION NUMBER: US/10/672,866
; CURRENT FILING DATE: 2003-09-26
; PRIOR APPLICATION NUMBER: 10/633,843
; PRIOR FILING DATE: 2003-08-04
; PRIOR APPLICATION NUMBER: 09/888,360
; PRIOR FILING DATE: 2001-06-21
; NUMBER OF SEQ ID NOS: 339
; SEQ ID NO 67
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-10-672-866-67

Query Match 2.3%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 79;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 812 CAAGCCTGTGAATAAAAACC 831
||||||||||||||||||||
Db 20 CAAGCCTGTGAATAAAAACC 1

RESULT 153
US-10-672-866-68/c
; Sequence 68, Application US/10672866
; Publication No. US20050019915A1
; GENERAL INFORMATION:
; APPLICANT: C. Frank Bennett
; APPLICANT: Kenneth Dobie
; TITLE OF INVENTION: ANTISENSE MODULATION OF SUPEROXIDE DISMUTASE 1,
; TITLE OF INVENTION: SOLUBLE
; TITLE OF INVENTION: EXPRESSION
; FILE REFERENCE: RTS-0242
; CURRENT APPLICATION NUMBER: US/10/672,866
; CURRENT FILING DATE: 2003-09-26
; PRIOR APPLICATION NUMBER: 10/633,843
; PRIOR FILING DATE: 2003-08-04
; PRIOR APPLICATION NUMBER: 09/888,360
; PRIOR FILING DATE: 2001-06-21
; NUMBER OF SEQ ID NOS: 339
; SEQ ID NO 68
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-10-672-866-68

Query Match 2.3%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 79;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 814 AGCCTGTGAATAAAAACCCT 833
||||||||||||||||||||
Db 20 AGCCTGTGAATAAAAACCCT 1

RESULT 154
US-10-672-866-69/c
; Sequence 69, Application US/10672866
; Publication No. US20050019915A1
; GENERAL INFORMATION:
; APPLICANT: C. Frank Bennett
; APPLICANT: Kenneth Dobie
; TITLE OF INVENTION: ANTISENSE MODULATION OF SUPEROXIDE DISMUTASE 1,
; TITLE OF INVENTION: SOLUBLE
; TITLE OF INVENTION: EXPRESSION
; FILE REFERENCE: RTS-0242
; CURRENT APPLICATION NUMBER: US/10/672,866
; CURRENT FILING DATE: 2003-09-26
; PRIOR APPLICATION NUMBER: 10/633,843
; PRIOR FILING DATE: 2003-08-04
; PRIOR APPLICATION NUMBER: 09/888,360
; PRIOR FILING DATE: 2001-06-21
; NUMBER OF SEQ ID NOS: 339
; SEQ ID NO 69
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-10-672-866-69

Query Match 2.3%; Score 20; DB 1; Length 20;

```
  Best Local Similarity   100.0%;  Pred. No. 79;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        818 TGTGAATAAAAACCCTGTAT 837
              ||||||||||||||||||||
Db         20 TGTGAATAAAAACCCTGTAT 1


RESULT 155
US-10-672-866-70/c
; Sequence 70, Application US/10672866
; Publication No. US20050019915A1
; GENERAL INFORMATION:
;  APPLICANT: C. Frank Bennett
;  APPLICANT:  Kenneth Dobie
;  TITLE OF INVENTION: ANTISENSE MODULATION OF SUPEROXIDE DISMUTASE 1,
;  TITLE OF INVENTION:  SOLUBLE
;  TITLE OF INVENTION:  EXPRESSION
;  FILE REFERENCE: RTS-0242
;  CURRENT APPLICATION NUMBER: US/10/672,866
;  CURRENT FILING DATE:  2003-09-26
;  PRIOR APPLICATION NUMBER: 10/633,843
;  PRIOR FILING DATE: 2003-08-04
;  PRIOR APPLICATION NUMBER: 09/888,360
;  PRIOR FILING DATE: 2001-06-21
;  NUMBER OF SEQ ID NOS: 339
; SEQ ID NO 70
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Antisense Oligonucleotide
US-10-672-866-70

  Query Match             2.3%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 79;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        820 TGAATAAAAACCCTGTATGG 839
              ||||||||||||||||||||
Db         20 TGAATAAAAACCCTGTATGG 1


RESULT 156
US-10-672-866-71/c
; Sequence 71, Application US/10672866
; Publication No. US20050019915A1
; GENERAL INFORMATION:
;  APPLICANT: C. Frank Bennett
;  APPLICANT:  Kenneth Dobie
;  TITLE OF INVENTION: ANTISENSE MODULATION OF SUPEROXIDE DISMUTASE 1,
;  TITLE OF INVENTION:  SOLUBLE
;  TITLE OF INVENTION:  EXPRESSION
;  FILE REFERENCE: RTS-0242
;  CURRENT APPLICATION NUMBER: US/10/672,866
;  CURRENT FILING DATE:  2003-09-26
;  PRIOR APPLICATION NUMBER: 10/633,843
;  PRIOR FILING DATE: 2003-08-04
;  PRIOR APPLICATION NUMBER: 09/888,360
;  PRIOR FILING DATE: 2001-06-21
;  NUMBER OF SEQ ID NOS: 339
; SEQ ID NO 71
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Antisense Oligonucleotide
US-10-672-866-71

  Query Match             2.3%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 79;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        825 AAAAACCCTGTATGGCACTT 844
              ||||||||||||||||||||
Db         20 AAAAACCCTGTATGGCACTT 1


RESULT 157
US-10-672-866-72/c
; Sequence 72, Application US/10672866
; Publication No. US20050019915A1
; GENERAL INFORMATION:
;  APPLICANT: C. Frank Bennett
;  APPLICANT:  Kenneth Dobie
;  TITLE OF INVENTION: ANTISENSE MODULATION OF SUPEROXIDE DISMUTASE 1,
;  TITLE OF INVENTION:  SOLUBLE
;  TITLE OF INVENTION:  EXPRESSION
;  FILE REFERENCE: RTS-0242
;  CURRENT APPLICATION NUMBER: US/10/672,866
;  CURRENT FILING DATE:  2003-09-26
;  PRIOR APPLICATION NUMBER: 10/633,843
;  PRIOR FILING DATE: 2003-08-04
;  PRIOR APPLICATION NUMBER: 09/888,360
;  PRIOR FILING DATE: 2001-06-21
;  NUMBER OF SEQ ID NOS: 339
; SEQ ID NO 72
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Antisense Oligonucleotide
US-10-672-866-72

  Query Match             2.3%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 79;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        829 ACCCTGTATGGCACTTATTA 848
              ||||||||||||||||||||
Db         20 ACCCTGTATGGCACTTATTA 1


RESULT 158
US-10-672-866-73/c
; Sequence 73, Application US/10672866
; Publication No. US20050019915A1
; GENERAL INFORMATION:
;  APPLICANT: C. Frank Bennett
;  APPLICANT:  Kenneth Dobie
;  TITLE OF INVENTION: ANTISENSE MODULATION OF SUPEROXIDE DISMUTASE 1,
;  TITLE OF INVENTION:  SOLUBLE
;  TITLE OF INVENTION:  EXPRESSION
;  FILE REFERENCE: RTS-0242
;  CURRENT APPLICATION NUMBER: US/10/672,866
;  CURRENT FILING DATE:  2003-09-26
;  PRIOR APPLICATION NUMBER: 10/633,843
;  PRIOR FILING DATE: 2003-08-04
;  PRIOR APPLICATION NUMBER: 09/888,360
;  PRIOR FILING DATE: 2001-06-21
;  NUMBER OF SEQ ID NOS: 339
; SEQ ID NO 73
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Antisense Oligonucleotide
US-10-672-866-73

  Query Match             2.3%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 79;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        832 CTGTATGGCACTTATTATGA 851
              ||||||||||||||||||||
Db         20 CTGTATGGCACTTATTATGA 1
```

RESULT 159
US-10-672-866-74/c
; Sequence 74, Application US/10672866
; Publication No. US20050019915A1
; GENERAL INFORMATION:
; APPLICANT: C. Frank Bennett
; APPLICANT: Kenneth Dobie
; TITLE OF INVENTION: ANTISENSE MODULATION OF SUPEROXIDE DISMUTASE 1,
; TITLE OF INVENTION: SOLUBLE
; TITLE OF INVENTION: EXPRESSION
; FILE REFERENCE: RTS-0242
; CURRENT APPLICATION NUMBER: US/10/672,866
; CURRENT FILING DATE: 2003-09-26
; PRIOR APPLICATION NUMBER: 10/633,843
; PRIOR FILING DATE: 2003-08-04
; PRIOR APPLICATION NUMBER: 09/888,360
; PRIOR FILING DATE: 2001-06-21
; NUMBER OF SEQ ID NOS: 339
; SEQ ID NO 74
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-10-672-866-74

Query Match 2.3%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 79;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 833 TGTATGGCACTTATTATGAG 852
||||||||||||||||||||
Db 20 TGTATGGCACTTATTATGAG 1

RESULT 160
US-10-672-866-75/c
; Sequence 75, Application US/10672866
; Publication No. US20050019915A1
; GENERAL INFORMATION:
; APPLICANT: C. Frank Bennett
; APPLICANT: Kenneth Dobie
; TITLE OF INVENTION: ANTISENSE MODULATION OF SUPEROXIDE DISMUTASE 1,
; TITLE OF INVENTION: SOLUBLE
; TITLE OF INVENTION: EXPRESSION
; FILE REFERENCE: RTS-0242
; CURRENT APPLICATION NUMBER: US/10/672,866
; CURRENT FILING DATE: 2003-09-26
; PRIOR APPLICATION NUMBER: 10/633,843
; PRIOR FILING DATE: 2003-08-04
; PRIOR APPLICATION NUMBER: 09/888,360
; PRIOR FILING DATE: 2001-06-21
; NUMBER OF SEQ ID NOS: 339
; SEQ ID NO 75
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-10-672-866-75

Query Match 2.3%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 79;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 835 TATGGCACTTATTATGAGGC 854
||||||||||||||||||||
Db 20 TATGGCACTTATTATGAGGC 1

RESULT 161
US-10-672-866-76/c
; Sequence 76, Application US/10672866
; Publication No. US20050019915A1
; GENERAL INFORMATION:
; APPLICANT: C. Frank Bennett
; APPLICANT: Kenneth Dobie
; TITLE OF INVENTION: ANTISENSE MODULATION OF SUPEROXIDE DISMUTASE 1,
; TITLE OF INVENTION: SOLUBLE
; TITLE OF INVENTION: EXPRESSION
; FILE REFERENCE: RTS-0242
; CURRENT APPLICATION NUMBER: US/10/672,866
; CURRENT FILING DATE: 2003-09-26
; PRIOR APPLICATION NUMBER: 10/633,843
; PRIOR FILING DATE: 2003-08-04
; PRIOR APPLICATION NUMBER: 09/888,360
; PRIOR FILING DATE: 2001-06-21
; NUMBER OF SEQ ID NOS: 339
; SEQ ID NO 76
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-10-672-866-76

Query Match 2.3%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 79;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 843 TTATTATGAGGCTATTAAAA 862
||||||||||||||||||||
Db 20 TTATTATGAGGCTATTAAAA 1

RESULT 162
US-10-672-866-77/c
; Sequence 77, Application US/10672866
; Publication No. US20050019915A1
; GENERAL INFORMATION:
; APPLICANT: C. Frank Bennett
; APPLICANT: Kenneth Dobie
; TITLE OF INVENTION: ANTISENSE MODULATION OF SUPEROXIDE DISMUTASE 1,
; TITLE OF INVENTION: SOLUBLE
; TITLE OF INVENTION: EXPRESSION
; FILE REFERENCE: RTS-0242
; CURRENT APPLICATION NUMBER: US/10/672,866
; CURRENT FILING DATE: 2003-09-26
; PRIOR APPLICATION NUMBER: 10/633,843
; PRIOR FILING DATE: 2003-08-04
; PRIOR APPLICATION NUMBER: 09/888,360
; PRIOR FILING DATE: 2001-06-21
; NUMBER OF SEQ ID NOS: 339
; SEQ ID NO 77
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-10-672-866-77

Query Match 2.3%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 79;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 849 TGAGGCTATTAAAAGAATCC 868
||||||||||||||||||||
Db 20 TGAGGCTATTAAAAGAATCC 1

RESULT 163
US-10-672-866-91/c
; Sequence 91, Application US/10672866
; Publication No. US20050019915A1

```
; GENERAL INFORMATION:
;  APPLICANT: C. Frank Bennett
;  APPLICANT:  Kenneth Dobie
;  TITLE OF INVENTION: ANTISENSE MODULATION OF SUPEROXIDE DISMUTASE 1,
;  TITLE OF INVENTION:  SOLUBLE
;  TITLE OF INVENTION:  EXPRESSION
;  FILE REFERENCE: RTS-0242
;  CURRENT APPLICATION NUMBER: US/10/672,866
;  CURRENT FILING DATE:  2003-09-26
;  PRIOR APPLICATION NUMBER: 10/633,843
;  PRIOR FILING DATE: 2003-08-04
;  PRIOR APPLICATION NUMBER: 09/888,360
;  PRIOR FILING DATE: 2001-06-21
;  NUMBER OF SEQ ID NOS: 339
; SEQ ID NO 91
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Antisense Oligonucleotide
US-10-672-866-91

  Query Match             2.3%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 79;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy         66 TGGCGACGAAGGCCGTGTGC 85
              ||||||||||||||||||||
Db         20 TGGCGACGAAGGCCGTGTGC 1


RESULT 164
US-10-672-866-92/c
; Sequence 92, Application US/10672866
; Publication No. US20050019915A1
; GENERAL INFORMATION:
;  APPLICANT: C. Frank Bennett
;  APPLICANT:  Kenneth Dobie
;  TITLE OF INVENTION: ANTISENSE MODULATION OF SUPEROXIDE DISMUTASE 1,
;  TITLE OF INVENTION:  SOLUBLE
;  TITLE OF INVENTION:  EXPRESSION
;  FILE REFERENCE: RTS-0242
;  CURRENT APPLICATION NUMBER: US/10/672,866
;  CURRENT FILING DATE:  2003-09-26
;  PRIOR APPLICATION NUMBER: 10/633,843
;  PRIOR FILING DATE: 2003-08-04
;  PRIOR APPLICATION NUMBER: 09/888,360
;  PRIOR FILING DATE: 2001-06-21
;  NUMBER OF SEQ ID NOS: 339
; SEQ ID NO 92
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Antisense Oligonucleotide
US-10-672-866-92

  Query Match             2.3%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 79;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy         74 AAGGCCGTGTGCGTGCTGAA 93
              ||||||||||||||||||||
Db         20 AAGGCCGTGTGCGTGCTGAA 1


RESULT 165
US-10-672-866-93/c
; Sequence 93, Application US/10672866
; Publication No. US20050019915A1
; GENERAL INFORMATION:
;  APPLICANT: C. Frank Bennett
;  APPLICANT:  Kenneth Dobie
;  TITLE OF INVENTION: ANTISENSE MODULATION OF SUPEROXIDE DISMUTASE 1,
;  TITLE OF INVENTION:  SOLUBLE
;  TITLE OF INVENTION:  EXPRESSION
;  FILE REFERENCE: RTS-0242
;  CURRENT APPLICATION NUMBER: US/10/672,866
;  CURRENT FILING DATE:  2003-09-26
;  PRIOR APPLICATION NUMBER: 10/633,843
;  PRIOR FILING DATE: 2003-08-04
;  PRIOR APPLICATION NUMBER: 09/888,360
;  PRIOR FILING DATE: 2001-06-21
;  NUMBER OF SEQ ID NOS: 339
; SEQ ID NO 93
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Antisense Oligonucleotide
US-10-672-866-93

  Query Match             2.3%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 79;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy         76 GGCCGTGTGCGTGCTGAAGG 95
              ||||||||||||||||||||
Db         20 GGCCGTGTGCGTGCTGAAGG 1


RESULT 166
US-10-672-866-94/c
; Sequence 94, Application US/10672866
; Publication No. US20050019915A1
; GENERAL INFORMATION:
;  APPLICANT: C. Frank Bennett
;  APPLICANT:  Kenneth Dobie
;  TITLE OF INVENTION: ANTISENSE MODULATION OF SUPEROXIDE DISMUTASE 1,
;  TITLE OF INVENTION:  SOLUBLE
;  TITLE OF INVENTION:  EXPRESSION
;  FILE REFERENCE: RTS-0242
;  CURRENT APPLICATION NUMBER: US/10/672,866
;  CURRENT FILING DATE:  2003-09-26
;  PRIOR APPLICATION NUMBER: 10/633,843
;  PRIOR FILING DATE: 2003-08-04
;  PRIOR APPLICATION NUMBER: 09/888,360
;  PRIOR FILING DATE: 2001-06-21
;  NUMBER OF SEQ ID NOS: 339
; SEQ ID NO 94
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Antisense Oligonucleotide
US-10-672-866-94

  Query Match             2.3%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 79;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy         77 GCCGTGTGCGTGCTGAAGGG 96
              ||||||||||||||||||||
Db         20 GCCGTGTGCGTGCTGAAGGG 1


RESULT 167
US-10-672-866-95/c
; Sequence 95, Application US/10672866
; Publication No. US20050019915A1
; GENERAL INFORMATION:
;  APPLICANT: C. Frank Bennett
;  APPLICANT:  Kenneth Dobie
;  TITLE OF INVENTION: ANTISENSE MODULATION OF SUPEROXIDE DISMUTASE 1,
;  TITLE OF INVENTION:  SOLUBLE
;  TITLE OF INVENTION:  EXPRESSION
```

```
;  FILE REFERENCE: RTS-0242
;  CURRENT APPLICATION NUMBER: US/10/672,866
;  CURRENT FILING DATE:  2003-09-26
;  PRIOR APPLICATION NUMBER: 10/633,843
;  PRIOR FILING DATE: 2003-08-04
;  PRIOR APPLICATION NUMBER: 09/888,360
;  PRIOR FILING DATE: 2001-06-21
;  NUMBER OF SEQ ID NOS: 339
; SEQ ID NO 95
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Antisense Oligonucleotide
US-10-672-866-95

  Query Match             2.3%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 79;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy         79 CGTGTGCGTGCTGAAGGGCG 98
              ||||||||||||||||||||
Db         20 CGTGTGCGTGCTGAAGGGCG 1


RESULT 168
US-10-672-866-96/c
; Sequence 96, Application US/10672866
; Publication No. US20050019915A1
; GENERAL INFORMATION:
;  APPLICANT: C. Frank Bennett
;  APPLICANT:  Kenneth Dobie
;  TITLE OF INVENTION: ANTISENSE MODULATION OF SUPEROXIDE DISMUTASE 1,
;  TITLE OF INVENTION:  SOLUBLE
;  TITLE OF INVENTION:  EXPRESSION
;  FILE REFERENCE: RTS-0242
;  CURRENT APPLICATION NUMBER: US/10/672,866
;  CURRENT FILING DATE:  2003-09-26
;  PRIOR APPLICATION NUMBER: 10/633,843
;  PRIOR FILING DATE: 2003-08-04
;  PRIOR APPLICATION NUMBER: 09/888,360
;  PRIOR FILING DATE: 2001-06-21
;  NUMBER OF SEQ ID NOS: 339
; SEQ ID NO 96
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Antisense Oligonucleotide
US-10-672-866-96

  Query Match             2.3%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 79;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy         80 GTGTGCGTGCTGAAGGGCGA 99
              ||||||||||||||||||||
Db         20 GTGTGCGTGCTGAAGGGCGA 1


RESULT 169
US-10-672-866-97/c
; Sequence 97, Application US/10672866
; Publication No. US20050019915A1
; GENERAL INFORMATION:
;  APPLICANT: C. Frank Bennett
;  APPLICANT:  Kenneth Dobie
;  TITLE OF INVENTION: ANTISENSE MODULATION OF SUPEROXIDE DISMUTASE 1,
;  TITLE OF INVENTION:  SOLUBLE
;  TITLE OF INVENTION:  EXPRESSION
;  FILE REFERENCE: RTS-0242
;  CURRENT APPLICATION NUMBER: US/10/672,866
;  CURRENT FILING DATE:  2003-09-26
;  PRIOR APPLICATION NUMBER: 10/633,843
;  PRIOR FILING DATE: 2003-08-04
;  PRIOR APPLICATION NUMBER: 09/888,360
;  PRIOR FILING DATE: 2001-06-21
;  NUMBER OF SEQ ID NOS: 339
; SEQ ID NO 97
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Antisense Oligonucleotide
US-10-672-866-97

  Query Match             2.3%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 79;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy         82 GTGCGTGCTGAAGGGCGACG 101
              ||||||||||||||||||||
Db         20 GTGCGTGCTGAAGGGCGACG 1


RESULT 170
US-10-672-866-98/c
; Sequence 98, Application US/10672866
; Publication No. US20050019915A1
; GENERAL INFORMATION:
;  APPLICANT: C. Frank Bennett
;  APPLICANT:  Kenneth Dobie
;  TITLE OF INVENTION: ANTISENSE MODULATION OF SUPEROXIDE DISMUTASE 1,
;  TITLE OF INVENTION:  SOLUBLE
;  TITLE OF INVENTION:  EXPRESSION
;  FILE REFERENCE: RTS-0242
;  CURRENT APPLICATION NUMBER: US/10/672,866
;  CURRENT FILING DATE:  2003-09-26
;  PRIOR APPLICATION NUMBER: 10/633,843
;  PRIOR FILING DATE: 2003-08-04
;  PRIOR APPLICATION NUMBER: 09/888,360
;  PRIOR FILING DATE: 2001-06-21
;  NUMBER OF SEQ ID NOS: 339
; SEQ ID NO 98
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Antisense Oligonucleotide
US-10-672-866-98

  Query Match             2.3%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 79;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy         83 TGCGTGCTGAAGGGCGACGG 102
              ||||||||||||||||||||
Db         20 TGCGTGCTGAAGGGCGACGG 1


RESULT 171
US-10-672-866-99/c
; Sequence 99, Application US/10672866
; Publication No. US20050019915A1
; GENERAL INFORMATION:
;  APPLICANT: C. Frank Bennett
;  APPLICANT:  Kenneth Dobie
;  TITLE OF INVENTION: ANTISENSE MODULATION OF SUPEROXIDE DISMUTASE 1,
;  TITLE OF INVENTION:  SOLUBLE
;  TITLE OF INVENTION:  EXPRESSION
;  FILE REFERENCE: RTS-0242
;  CURRENT APPLICATION NUMBER: US/10/672,866
;  CURRENT FILING DATE:  2003-09-26
;  PRIOR APPLICATION NUMBER: 10/633,843
;  PRIOR FILING DATE: 2003-08-04
;  PRIOR APPLICATION NUMBER: 09/888,360
```

```
;  PRIOR FILING DATE: 2001-06-21
;  NUMBER OF SEQ ID NOS: 339
; SEQ ID NO 99
;    LENGTH: 20
;    TYPE: DNA
;    ORGANISM: Artificial Sequence
;    FEATURE:
;    OTHER INFORMATION: Antisense Oligonucleotide
US-10-672-866-99

  Query Match             2.3%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 79;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        292 GGATGAAGAGAGGCATGTTG 311
              ||||||||||||||||||||
Db         20 GGATGAAGAGAGGCATGTTG 1


RESULT 172
US-10-672-866-100/c
; Sequence 100, Application US/10672866
; Publication No. US20050019915A1
; GENERAL INFORMATION:
;  APPLICANT: C. Frank Bennett
;  APPLICANT:  Kenneth Dobie
;  TITLE OF INVENTION: ANTISENSE MODULATION OF SUPEROXIDE DISMUTASE 1,
;  TITLE OF INVENTION:  SOLUBLE
;  TITLE OF INVENTION:  EXPRESSION
;  FILE REFERENCE: RTS-0242
;  CURRENT APPLICATION NUMBER: US/10/672,866
;  CURRENT FILING DATE:  2003-09-26
;  PRIOR APPLICATION NUMBER: 10/633,843
;  PRIOR FILING DATE: 2003-08-04
;  PRIOR APPLICATION NUMBER: 09/888,360
;  PRIOR FILING DATE: 2001-06-21
;  NUMBER OF SEQ ID NOS: 339
; SEQ ID NO 100
;    LENGTH: 20
;    TYPE: DNA
;    ORGANISM: Artificial Sequence
;    FEATURE:
;    OTHER INFORMATION: Antisense Oligonucleotide
US-10-672-866-100

  Query Match             2.3%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 79;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        293 GATGAAGAGAGGCATGTTGG 312
              ||||||||||||||||||||
Db         20 GATGAAGAGAGGCATGTTGG 1


RESULT 173
US-10-672-866-101/c
; Sequence 101, Application US/10672866
; Publication No. US20050019915A1
; GENERAL INFORMATION:
;  APPLICANT: C. Frank Bennett
;  APPLICANT:  Kenneth Dobie
;  TITLE OF INVENTION: ANTISENSE MODULATION OF SUPEROXIDE DISMUTASE 1,
;  TITLE OF INVENTION:  SOLUBLE
;  TITLE OF INVENTION:  EXPRESSION
;  FILE REFERENCE: RTS-0242
;  CURRENT APPLICATION NUMBER: US/10/672,866
;  CURRENT FILING DATE:  2003-09-26
;  PRIOR APPLICATION NUMBER: 10/633,843
;  PRIOR FILING DATE: 2003-08-04
;  PRIOR APPLICATION NUMBER: 09/888,360
;  PRIOR FILING DATE: 2001-06-21
;  NUMBER OF SEQ ID NOS: 339
; SEQ ID NO 101
;    LENGTH: 20
;    TYPE: DNA
;    ORGANISM: Artificial Sequence
;    FEATURE:
;    OTHER INFORMATION: Antisense Oligonucleotide
US-10-672-866-101

  Query Match             2.3%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 79;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        294 ATGAAGAGAGGCATGTTGGA 313
              ||||||||||||||||||||
Db         20 ATGAAGAGAGGCATGTTGGA 1


RESULT 174
US-10-672-866-102/c
; Sequence 102, Application US/10672866
; Publication No. US20050019915A1
; GENERAL INFORMATION:
;  APPLICANT: C. Frank Bennett
;  APPLICANT:  Kenneth Dobie
;  TITLE OF INVENTION: ANTISENSE MODULATION OF SUPEROXIDE DISMUTASE 1,
;  TITLE OF INVENTION:  SOLUBLE
;  TITLE OF INVENTION:  EXPRESSION
;  FILE REFERENCE: RTS-0242
;  CURRENT APPLICATION NUMBER: US/10/672,866
;  CURRENT FILING DATE:  2003-09-26
;  PRIOR APPLICATION NUMBER: 10/633,843
;  PRIOR FILING DATE: 2003-08-04
;  PRIOR APPLICATION NUMBER: 09/888,360
;  PRIOR FILING DATE: 2001-06-21
;  NUMBER OF SEQ ID NOS: 339
; SEQ ID NO 102
;    LENGTH: 20
;    TYPE: DNA
;    ORGANISM: Artificial Sequence
;    FEATURE:
;    OTHER INFORMATION: Antisense Oligonucleotide
US-10-672-866-102

  Query Match             2.3%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 79;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        295 TGAAGAGAGGCATGTTGGAG 314
              ||||||||||||||||||||
Db         20 TGAAGAGAGGCATGTTGGAG 1


RESULT 175
US-10-672-866-103/c
; Sequence 103, Application US/10672866
; Publication No. US20050019915A1
; GENERAL INFORMATION:
;  APPLICANT: C. Frank Bennett
;  APPLICANT:  Kenneth Dobie
;  TITLE OF INVENTION: ANTISENSE MODULATION OF SUPEROXIDE DISMUTASE 1,
;  TITLE OF INVENTION:  SOLUBLE
;  TITLE OF INVENTION:  EXPRESSION
;  FILE REFERENCE: RTS-0242
;  CURRENT APPLICATION NUMBER: US/10/672,866
;  CURRENT FILING DATE:  2003-09-26
;  PRIOR APPLICATION NUMBER: 10/633,843
;  PRIOR FILING DATE: 2003-08-04
;  PRIOR APPLICATION NUMBER: 09/888,360
;  PRIOR FILING DATE: 2001-06-21
;  NUMBER OF SEQ ID NOS: 339
; SEQ ID NO 103
;    LENGTH: 20
;    TYPE: DNA
;    ORGANISM: Artificial Sequence
```

```
;   FEATURE:
;   OTHER INFORMATION: Antisense Oligonucleotide
US-10-672-866-103

  Query Match             2.3%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 79;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        296 GAAGAGAGGCATGTTGGAGA 315
              ||||||||||||||||||||
Db         20 GAAGAGAGGCATGTTGGAGA 1


RESULT 176
US-10-672-866-104/c
; Sequence 104, Application US/10672866
; Publication No. US20050019915A1
; GENERAL INFORMATION:
;  APPLICANT: C. Frank Bennett
;  APPLICANT:  Kenneth Dobie
;  TITLE OF INVENTION: ANTISENSE MODULATION OF SUPEROXIDE DISMUTASE 1,
;  TITLE OF INVENTION:  SOLUBLE
;  TITLE OF INVENTION:  EXPRESSION
;  FILE REFERENCE: RTS-0242
;  CURRENT APPLICATION NUMBER: US/10/672,866
;  CURRENT FILING DATE:  2003-09-26
;  PRIOR APPLICATION NUMBER: 10/633,843
;  PRIOR FILING DATE: 2003-08-04
;  PRIOR APPLICATION NUMBER: 09/888,360
;  PRIOR FILING DATE: 2001-06-21
;  NUMBER OF SEQ ID NOS: 339
; SEQ ID NO 104
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Antisense Oligonucleotide
US-10-672-866-104

  Query Match             2.3%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 79;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        297 AAGAGAGGCATGTTGGAGAC 316
              ||||||||||||||||||||
Db         20 AAGAGAGGCATGTTGGAGAC 1


RESULT 177
US-10-672-866-105/c
; Sequence 105, Application US/10672866
; Publication No. US20050019915A1
; GENERAL INFORMATION:
;  APPLICANT: C. Frank Bennett
;  APPLICANT:  Kenneth Dobie
;  TITLE OF INVENTION: ANTISENSE MODULATION OF SUPEROXIDE DISMUTASE 1,
;  TITLE OF INVENTION:  SOLUBLE
;  TITLE OF INVENTION:  EXPRESSION
;  FILE REFERENCE: RTS-0242
;  CURRENT APPLICATION NUMBER: US/10/672,866
;  CURRENT FILING DATE:  2003-09-26
;  PRIOR APPLICATION NUMBER: 10/633,843
;  PRIOR FILING DATE: 2003-08-04
;  PRIOR APPLICATION NUMBER: 09/888,360
;  PRIOR FILING DATE: 2001-06-21
;  NUMBER OF SEQ ID NOS: 339
; SEQ ID NO 105
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Antisense Oligonucleotide
US-10-672-866-105

  Query Match             2.3%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 79;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        373 TGTGATCTCACTCTCAGGAG 392
              ||||||||||||||||||||
Db         20 TGTGATCTCACTCTCAGGAG 1


RESULT 178
US-10-672-866-106/c
; Sequence 106, Application US/10672866
; Publication No. US20050019915A1
; GENERAL INFORMATION:
;  APPLICANT: C. Frank Bennett
;  APPLICANT:  Kenneth Dobie
;  TITLE OF INVENTION: ANTISENSE MODULATION OF SUPEROXIDE DISMUTASE 1,
;  TITLE OF INVENTION:  SOLUBLE
;  TITLE OF INVENTION:  EXPRESSION
;  FILE REFERENCE: RTS-0242
;  CURRENT APPLICATION NUMBER: US/10/672,866
;  CURRENT FILING DATE:  2003-09-26
;  PRIOR APPLICATION NUMBER: 10/633,843
;  PRIOR FILING DATE: 2003-08-04
;  PRIOR APPLICATION NUMBER: 09/888,360
;  PRIOR FILING DATE: 2001-06-21
;  NUMBER OF SEQ ID NOS: 339
; SEQ ID NO 106
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Antisense Oligonucleotide
US-10-672-866-106

  Query Match             2.3%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 79;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        374 GTGATCTCACTCTCAGGAGA 393
              ||||||||||||||||||||
Db         20 GTGATCTCACTCTCAGGAGA 1


RESULT 179
US-10-672-866-107/c
; Sequence 107, Application US/10672866
; Publication No. US20050019915A1
; GENERAL INFORMATION:
;  APPLICANT: C. Frank Bennett
;  APPLICANT:  Kenneth Dobie
;  TITLE OF INVENTION: ANTISENSE MODULATION OF SUPEROXIDE DISMUTASE 1,
;  TITLE OF INVENTION:  SOLUBLE
;  TITLE OF INVENTION:  EXPRESSION
;  FILE REFERENCE: RTS-0242
;  CURRENT APPLICATION NUMBER: US/10/672,866
;  CURRENT FILING DATE:  2003-09-26
;  PRIOR APPLICATION NUMBER: 10/633,843
;  PRIOR FILING DATE: 2003-08-04
;  PRIOR APPLICATION NUMBER: 09/888,360
;  PRIOR FILING DATE: 2001-06-21
;  NUMBER OF SEQ ID NOS: 339
; SEQ ID NO 107
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Antisense Oligonucleotide
US-10-672-866-107

  Query Match             2.3%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 79;
```

```
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        436 AGATGACTTGGGCAAAGGTG 455
              ||||||||||||||||||||
Db         20 AGATGACTTGGGCAAAGGTG 1


RESULT 180
US-10-672-866-108/c
; Sequence 108, Application US/10672866
; Publication No. US20050019915A1
; GENERAL INFORMATION:
;  APPLICANT: C. Frank Bennett
;  APPLICANT:  Kenneth Dobie
;  TITLE OF INVENTION: ANTISENSE MODULATION OF SUPEROXIDE DISMUTASE 1,
;  TITLE OF INVENTION:  SOLUBLE
;  TITLE OF INVENTION:  EXPRESSION
;  FILE REFERENCE: RTS-0242
;  CURRENT APPLICATION NUMBER: US/10/672,866
;  CURRENT FILING DATE:  2003-09-26
;  PRIOR APPLICATION NUMBER: 10/633,843
;  PRIOR FILING DATE: 2003-08-04
;  PRIOR APPLICATION NUMBER: 09/888,360
;  PRIOR FILING DATE: 2001-06-21
;  NUMBER OF SEQ ID NOS: 339
; SEQ ID NO 108
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Antisense Oligonucleotide
US-10-672-866-108

  Query Match             2.3%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 79;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        437 GATGACTTGGGCAAAGGTGG 456
              ||||||||||||||||||||
Db         20 GATGACTTGGGCAAAGGTGG 1


RESULT 181
US-10-672-866-109/c
; Sequence 109, Application US/10672866
; Publication No. US20050019915A1
; GENERAL INFORMATION:
;  APPLICANT: C. Frank Bennett
;  APPLICANT:  Kenneth Dobie
;  TITLE OF INVENTION: ANTISENSE MODULATION OF SUPEROXIDE DISMUTASE 1,
;  TITLE OF INVENTION:  SOLUBLE
;  TITLE OF INVENTION:  EXPRESSION
;  FILE REFERENCE: RTS-0242
;  CURRENT APPLICATION NUMBER: US/10/672,866
;  CURRENT FILING DATE:  2003-09-26
;  PRIOR APPLICATION NUMBER: 10/633,843
;  PRIOR FILING DATE: 2003-08-04
;  PRIOR APPLICATION NUMBER: 09/888,360
;  PRIOR FILING DATE: 2001-06-21
;  NUMBER OF SEQ ID NOS: 339
; SEQ ID NO 109
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Antisense Oligonucleotide
US-10-672-866-109

  Query Match             2.3%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 79;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        438 ATGACTTGGGCAAAGGTGGA 457
              ||||||||||||||||||||
Db         20 ATGACTTGGGCAAAGGTGGA 1


RESULT 182
US-10-672-866-110/c
; Sequence 110, Application US/10672866
; Publication No. US20050019915A1
; GENERAL INFORMATION:
;  APPLICANT: C. Frank Bennett
;  APPLICANT:  Kenneth Dobie
;  TITLE OF INVENTION: ANTISENSE MODULATION OF SUPEROXIDE DISMUTASE 1,
;  TITLE OF INVENTION:  SOLUBLE
;  TITLE OF INVENTION:  EXPRESSION
;  FILE REFERENCE: RTS-0242
;  CURRENT APPLICATION NUMBER: US/10/672,866
;  CURRENT FILING DATE:  2003-09-26
;  PRIOR APPLICATION NUMBER: 10/633,843
;  PRIOR FILING DATE: 2003-08-04
;  PRIOR APPLICATION NUMBER: 09/888,360
;  PRIOR FILING DATE: 2001-06-21
;  NUMBER OF SEQ ID NOS: 339
; SEQ ID NO 110
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Antisense Oligonucleotide
US-10-672-866-110

  Query Match             2.3%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 79;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        439 TGACTTGGGCAAAGGTGGAA 458
              ||||||||||||||||||||
Db         20 TGACTTGGGCAAAGGTGGAA 1


RESULT 183
US-10-672-866-111/c
; Sequence 111, Application US/10672866
; Publication No. US20050019915A1
; GENERAL INFORMATION:
;  APPLICANT: C. Frank Bennett
;  APPLICANT:  Kenneth Dobie
;  TITLE OF INVENTION: ANTISENSE MODULATION OF SUPEROXIDE DISMUTASE 1,
;  TITLE OF INVENTION:  SOLUBLE
;  TITLE OF INVENTION:  EXPRESSION
;  FILE REFERENCE: RTS-0242
;  CURRENT APPLICATION NUMBER: US/10/672,866
;  CURRENT FILING DATE:  2003-09-26
;  PRIOR APPLICATION NUMBER: 10/633,843
;  PRIOR FILING DATE: 2003-08-04
;  PRIOR APPLICATION NUMBER: 09/888,360
;  PRIOR FILING DATE: 2001-06-21
;  NUMBER OF SEQ ID NOS: 339
; SEQ ID NO 111
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Antisense Oligonucleotide
US-10-672-866-111

  Query Match             2.3%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 79;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        441 ACTTGGGCAAAGGTGGAAAT 460
              ||||||||||||||||||||
Db         20 ACTTGGGCAAAGGTGGAAAT 1
```

```
RESULT 184
US-10-672-866-112/c
; Sequence 112, Application US/10672866
; Publication No. US20050019915A1
; GENERAL INFORMATION:
;  APPLICANT: C. Frank Bennett
;  APPLICANT:  Kenneth Dobie
;  TITLE OF INVENTION: ANTISENSE MODULATION OF SUPEROXIDE DISMUTASE 1,
;  TITLE OF INVENTION:  SOLUBLE
;  TITLE OF INVENTION:  EXPRESSION
;  FILE REFERENCE: RTS-0242
;  CURRENT APPLICATION NUMBER: US/10/672,866
;  CURRENT FILING DATE:  2003-09-26
;  PRIOR APPLICATION NUMBER: 10/633,843
;  PRIOR FILING DATE: 2003-08-04
;  PRIOR APPLICATION NUMBER: 09/888,360
;  PRIOR FILING DATE: 2001-06-21
;  NUMBER OF SEQ ID NOS: 339
; SEQ ID NO 112
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Antisense Oligonucleotide
US-10-672-866-112

  Query Match             2.3%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 79;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        442 CTTGGGCAAAGGTGGAAATG 461
              ||||||||||||||||||||
Db         20 CTTGGGCAAAGGTGGAAATG 1


RESULT 185
US-10-672-866-113/c
; Sequence 113, Application US/10672866
; Publication No. US20050019915A1
; GENERAL INFORMATION:
;  APPLICANT: C. Frank Bennett
;  APPLICANT:  Kenneth Dobie
;  TITLE OF INVENTION: ANTISENSE MODULATION OF SUPEROXIDE DISMUTASE 1,
;  TITLE OF INVENTION:  SOLUBLE
;  TITLE OF INVENTION:  EXPRESSION
;  FILE REFERENCE: RTS-0242
;  CURRENT APPLICATION NUMBER: US/10/672,866
;  CURRENT FILING DATE:  2003-09-26
;  PRIOR APPLICATION NUMBER: 10/633,843
;  PRIOR FILING DATE: 2003-08-04
;  PRIOR APPLICATION NUMBER: 09/888,360
;  PRIOR FILING DATE: 2001-06-21
;  NUMBER OF SEQ ID NOS: 339
; SEQ ID NO 113
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Antisense Oligonucleotide
US-10-672-866-113

  Query Match             2.3%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 79;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        443 TTGGGCAAAGGTGGAAATGA 462
              ||||||||||||||||||||
Db         20 TTGGGCAAAGGTGGAAATGA 1


RESULT 186
US-10-672-866-114/c
; Sequence 114, Application US/10672866
; Publication No. US20050019915A1
; GENERAL INFORMATION:
;  APPLICANT: C. Frank Bennett
;  APPLICANT:  Kenneth Dobie
;  TITLE OF INVENTION: ANTISENSE MODULATION OF SUPEROXIDE DISMUTASE 1,
;  TITLE OF INVENTION:  SOLUBLE
;  TITLE OF INVENTION:  EXPRESSION
;  FILE REFERENCE: RTS-0242
;  CURRENT APPLICATION NUMBER: US/10/672,866
;  CURRENT FILING DATE:  2003-09-26
;  PRIOR APPLICATION NUMBER: 10/633,843
;  PRIOR FILING DATE: 2003-08-04
;  PRIOR APPLICATION NUMBER: 09/888,360
;  PRIOR FILING DATE: 2001-06-21
;  NUMBER OF SEQ ID NOS: 339
; SEQ ID NO 114
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Antisense Oligonucleotide
US-10-672-866-114

  Query Match             2.3%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 79;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        444 TGGGCAAAGGTGGAAATGAA 463
              ||||||||||||||||||||
Db         20 TGGGCAAAGGTGGAAATGAA 1


RESULT 187
US-10-672-866-115/c
; Sequence 115, Application US/10672866
; Publication No. US20050019915A1
; GENERAL INFORMATION:
;  APPLICANT: C. Frank Bennett
;  APPLICANT:  Kenneth Dobie
;  TITLE OF INVENTION: ANTISENSE MODULATION OF SUPEROXIDE DISMUTASE 1,
;  TITLE OF INVENTION:  SOLUBLE
;  TITLE OF INVENTION:  EXPRESSION
;  FILE REFERENCE: RTS-0242
;  CURRENT APPLICATION NUMBER: US/10/672,866
;  CURRENT FILING DATE:  2003-09-26
;  PRIOR APPLICATION NUMBER: 10/633,843
;  PRIOR FILING DATE: 2003-08-04
;  PRIOR APPLICATION NUMBER: 09/888,360
;  PRIOR FILING DATE: 2001-06-21
;  NUMBER OF SEQ ID NOS: 339
; SEQ ID NO 115
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Antisense Oligonucleotide
US-10-672-866-115

  Query Match             2.3%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 79;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        445 GGGCAAAGGTGGAAATGAAG 464
              ||||||||||||||||||||
Db         20 GGGCAAAGGTGGAAATGAAG 1


RESULT 188
US-10-672-866-116/c
; Sequence 116, Application US/10672866
; Publication No. US20050019915A1
; GENERAL INFORMATION:
```

```
;  APPLICANT: C. Frank Bennett
;  APPLICANT:  Kenneth Dobie
;  TITLE OF INVENTION: ANTISENSE MODULATION OF SUPEROXIDE DISMUTASE 1,
;  TITLE OF INVENTION:  SOLUBLE
;  TITLE OF INVENTION:  EXPRESSION
;  FILE REFERENCE: RTS-0242
;  CURRENT APPLICATION NUMBER: US/10/672,866
;  CURRENT FILING DATE:  2003-09-26
;  PRIOR APPLICATION NUMBER: 10/633,843
;  PRIOR FILING DATE: 2003-08-04
;  PRIOR APPLICATION NUMBER: 09/888,360
;  PRIOR FILING DATE: 2001-06-21
;  NUMBER OF SEQ ID NOS: 339
; SEQ ID NO 116
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Antisense Oligonucleotide
US-10-672-866-116

  Query Match             2.3%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 79;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        446 GGCAAAGGTGGAAATGAAGA 465
              ||||||||||||||||||||
Db         20 GGCAAAGGTGGAAATGAAGA 1


RESULT 189
US-10-672-866-117/c
; Sequence 117, Application US/10672866
; Publication No. US20050019915A1
; GENERAL INFORMATION:
;  APPLICANT: C. Frank Bennett
;  APPLICANT:  Kenneth Dobie
;  TITLE OF INVENTION: ANTISENSE MODULATION OF SUPEROXIDE DISMUTASE 1,
;  TITLE OF INVENTION:  SOLUBLE
;  TITLE OF INVENTION:  EXPRESSION
;  FILE REFERENCE: RTS-0242
;  CURRENT APPLICATION NUMBER: US/10/672,866
;  CURRENT FILING DATE:  2003-09-26
;  PRIOR APPLICATION NUMBER: 10/633,843
;  PRIOR FILING DATE: 2003-08-04
;  PRIOR APPLICATION NUMBER: 09/888,360
;  PRIOR FILING DATE: 2001-06-21
;  NUMBER OF SEQ ID NOS: 339
; SEQ ID NO 117
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Antisense Oligonucleotide
US-10-672-866-117

  Query Match             2.3%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 79;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        447 GCAAAGGTGGAAATGAAGAA 466
              ||||||||||||||||||||
Db         20 GCAAAGGTGGAAATGAAGAA 1


RESULT 190
US-10-672-866-118/c
; Sequence 118, Application US/10672866
; Publication No. US20050019915A1
; GENERAL INFORMATION:
;  APPLICANT: C. Frank Bennett
;  APPLICANT:  Kenneth Dobie
;  TITLE OF INVENTION: ANTISENSE MODULATION OF SUPEROXIDE DISMUTASE 1,
;  TITLE OF INVENTION:  SOLUBLE
;  TITLE OF INVENTION:  EXPRESSION
;  FILE REFERENCE: RTS-0242
;  CURRENT APPLICATION NUMBER: US/10/672,866
;  CURRENT FILING DATE:  2003-09-26
;  PRIOR APPLICATION NUMBER: 10/633,843
;  PRIOR FILING DATE: 2003-08-04
;  PRIOR APPLICATION NUMBER: 09/888,360
;  PRIOR FILING DATE: 2001-06-21
;  NUMBER OF SEQ ID NOS: 339
; SEQ ID NO 118
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Antisense Oligonucleotide
US-10-672-866-118

  Query Match             2.3%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 79;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        448 CAAAGGTGGAAATGAAGAAA 467
              ||||||||||||||||||||
Db         20 CAAAGGTGGAAATGAAGAAA 1


RESULT 191
US-10-672-866-119/c
; Sequence 119, Application US/10672866
; Publication No. US20050019915A1
; GENERAL INFORMATION:
;  APPLICANT: C. Frank Bennett
;  APPLICANT:  Kenneth Dobie
;  TITLE OF INVENTION: ANTISENSE MODULATION OF SUPEROXIDE DISMUTASE 1,
;  TITLE OF INVENTION:  SOLUBLE
;  TITLE OF INVENTION:  EXPRESSION
;  FILE REFERENCE: RTS-0242
;  CURRENT APPLICATION NUMBER: US/10/672,866
;  CURRENT FILING DATE:  2003-09-26
;  PRIOR APPLICATION NUMBER: 10/633,843
;  PRIOR FILING DATE: 2003-08-04
;  PRIOR APPLICATION NUMBER: 09/888,360
;  PRIOR FILING DATE: 2001-06-21
;  NUMBER OF SEQ ID NOS: 339
; SEQ ID NO 119
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Antisense Oligonucleotide
US-10-672-866-119

  Query Match             2.3%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 79;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        449 AAAGGTGGAAATGAAGAAAG 468
              ||||||||||||||||||||
Db         20 AAAGGTGGAAATGAAGAAAG 1


RESULT 192
US-10-672-866-120/c
; Sequence 120, Application US/10672866
; Publication No. US20050019915A1
; GENERAL INFORMATION:
;  APPLICANT: C. Frank Bennett
;  APPLICANT:  Kenneth Dobie
;  TITLE OF INVENTION: ANTISENSE MODULATION OF SUPEROXIDE DISMUTASE 1,
;  TITLE OF INVENTION:  SOLUBLE
;  TITLE OF INVENTION:  EXPRESSION
;  FILE REFERENCE: RTS-0242
```

```
;  CURRENT APPLICATION NUMBER: US/10/672,866
;  CURRENT FILING DATE:  2003-09-26
;  PRIOR APPLICATION NUMBER: 10/633,843
;  PRIOR FILING DATE: 2003-08-04
;  PRIOR APPLICATION NUMBER: 09/888,360
;  PRIOR FILING DATE: 2001-06-21
;  NUMBER OF SEQ ID NOS: 339
; SEQ ID NO 120
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Antisense Oligonucleotide
US-10-672-866-120

  Query Match             2.3%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 79;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        450 AAGGTGGAAATGAAGAAAGT 469
              ||||||||||||||||||||
Db         20 AAGGTGGAAATGAAGAAAGT 1


RESULT 193
US-10-672-866-121/c
; Sequence 121, Application US/10672866
; Publication No. US20050019915A1
; GENERAL INFORMATION:
;  APPLICANT: C. Frank Bennett
;  APPLICANT:  Kenneth Dobie
;  TITLE OF INVENTION: ANTISENSE MODULATION OF SUPEROXIDE DISMUTASE 1,
;  TITLE OF INVENTION:  SOLUBLE
;  TITLE OF INVENTION:  EXPRESSION
;  FILE REFERENCE: RTS-0242
;  CURRENT APPLICATION NUMBER: US/10/672,866
;  CURRENT FILING DATE:  2003-09-26
;  PRIOR APPLICATION NUMBER: 10/633,843
;  PRIOR FILING DATE: 2003-08-04
;  PRIOR APPLICATION NUMBER: 09/888,360
;  PRIOR FILING DATE: 2001-06-21
;  NUMBER OF SEQ ID NOS: 339
; SEQ ID NO 121
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Antisense Oligonucleotide
US-10-672-866-121

  Query Match             2.3%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 79;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        451 AGGTGGAAATGAAGAAAGTA 470
              ||||||||||||||||||||
Db         20 AGGTGGAAATGAAGAAAGTA 1


RESULT 194
US-10-672-866-122/c
; Sequence 122, Application US/10672866
; Publication No. US20050019915A1
; GENERAL INFORMATION:
;  APPLICANT: C. Frank Bennett
;  APPLICANT:  Kenneth Dobie
;  TITLE OF INVENTION: ANTISENSE MODULATION OF SUPEROXIDE DISMUTASE 1,
;  TITLE OF INVENTION:  SOLUBLE
;  TITLE OF INVENTION:  EXPRESSION
;  FILE REFERENCE: RTS-0242
;  CURRENT APPLICATION NUMBER: US/10/672,866
;  CURRENT FILING DATE:  2003-09-26
;  PRIOR APPLICATION NUMBER: 10/633,843
;  PRIOR FILING DATE: 2003-08-04
;  PRIOR APPLICATION NUMBER: 09/888,360
;  PRIOR FILING DATE: 2001-06-21
;  NUMBER OF SEQ ID NOS: 339
; SEQ ID NO 122
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Antisense Oligonucleotide
US-10-672-866-122

  Query Match             2.3%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 79;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        452 GGTGGAAATGAAGAAAGTAC 471
              ||||||||||||||||||||
Db         20 GGTGGAAATGAAGAAAGTAC 1


RESULT 195
US-10-672-866-123/c
; Sequence 123, Application US/10672866
; Publication No. US20050019915A1
; GENERAL INFORMATION:
;  APPLICANT: C. Frank Bennett
;  APPLICANT:  Kenneth Dobie
;  TITLE OF INVENTION: ANTISENSE MODULATION OF SUPEROXIDE DISMUTASE 1,
;  TITLE OF INVENTION:  SOLUBLE
;  TITLE OF INVENTION:  EXPRESSION
;  FILE REFERENCE: RTS-0242
;  CURRENT APPLICATION NUMBER: US/10/672,866
;  CURRENT FILING DATE:  2003-09-26
;  PRIOR APPLICATION NUMBER: 10/633,843
;  PRIOR FILING DATE: 2003-08-04
;  PRIOR APPLICATION NUMBER: 09/888,360
;  PRIOR FILING DATE: 2001-06-21
;  NUMBER OF SEQ ID NOS: 339
; SEQ ID NO 123
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Antisense Oligonucleotide
US-10-672-866-123

  Query Match             2.3%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 79;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        453 GTGGAAATGAAGAAAGTACA 472
              ||||||||||||||||||||
Db         20 GTGGAAATGAAGAAAGTACA 1


RESULT 196
US-10-672-866-124/c
; Sequence 124, Application US/10672866
; Publication No. US20050019915A1
; GENERAL INFORMATION:
;  APPLICANT: C. Frank Bennett
;  APPLICANT:  Kenneth Dobie
;  TITLE OF INVENTION: ANTISENSE MODULATION OF SUPEROXIDE DISMUTASE 1,
;  TITLE OF INVENTION:  SOLUBLE
;  TITLE OF INVENTION:  EXPRESSION
;  FILE REFERENCE: RTS-0242
;  CURRENT APPLICATION NUMBER: US/10/672,866
;  CURRENT FILING DATE:  2003-09-26
;  PRIOR APPLICATION NUMBER: 10/633,843
;  PRIOR FILING DATE: 2003-08-04
;  PRIOR APPLICATION NUMBER: 09/888,360
;  PRIOR FILING DATE: 2001-06-21
```

```
;  NUMBER OF SEQ ID NOS: 339
; SEQ ID NO 124
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Antisense Oligonucleotide
US-10-672-866-124

  Query Match             2.3%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 79;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        454 TGGAAATGAAGAAAGTACAA 473
              ||||||||||||||||||||
Db         20 TGGAAATGAAGAAAGTACAA 1


RESULT 197
US-10-672-866-125/c
; Sequence 125, Application US/10672866
; Publication No. US20050019915A1
; GENERAL INFORMATION:
;  APPLICANT: C. Frank Bennett
;  APPLICANT:  Kenneth Dobie
;  TITLE OF INVENTION: ANTISENSE MODULATION OF SUPEROXIDE DISMUTASE 1,
;  TITLE OF INVENTION:  SOLUBLE
;  TITLE OF INVENTION:  EXPRESSION
;  FILE REFERENCE: RTS-0242
;  CURRENT APPLICATION NUMBER: US/10/672,866
;  CURRENT FILING DATE:  2003-09-26
;  PRIOR APPLICATION NUMBER: 10/633,843
;  PRIOR FILING DATE: 2003-08-04
;  PRIOR APPLICATION NUMBER: 09/888,360
;  PRIOR FILING DATE: 2001-06-21
;  NUMBER OF SEQ ID NOS: 339
; SEQ ID NO 125
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Antisense Oligonucleotide
US-10-672-866-125

  Query Match             2.3%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 79;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        455 GGAAATGAAGAAAGTACAAA 474
              ||||||||||||||||||||
Db         20 GGAAATGAAGAAAGTACAAA 1


RESULT 198
US-10-672-866-126/c
; Sequence 126, Application US/10672866
; Publication No. US20050019915A1
; GENERAL INFORMATION:
;  APPLICANT: C. Frank Bennett
;  APPLICANT:  Kenneth Dobie
;  TITLE OF INVENTION: ANTISENSE MODULATION OF SUPEROXIDE DISMUTASE 1,
;  TITLE OF INVENTION:  SOLUBLE
;  TITLE OF INVENTION:  EXPRESSION
;  FILE REFERENCE: RTS-0242
;  CURRENT APPLICATION NUMBER: US/10/672,866
;  CURRENT FILING DATE:  2003-09-26
;  PRIOR APPLICATION NUMBER: 10/633,843
;  PRIOR FILING DATE: 2003-08-04
;  PRIOR APPLICATION NUMBER: 09/888,360
;  PRIOR FILING DATE: 2001-06-21
;  NUMBER OF SEQ ID NOS: 339
; SEQ ID NO 126
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Antisense Oligonucleotide
US-10-672-866-126

  Query Match             2.3%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 79;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        456 GAAATGAAGAAAGTACAAAG 475
              ||||||||||||||||||||
Db         20 GAAATGAAGAAAGTACAAAG 1


RESULT 199
US-10-672-866-127/c
; Sequence 127, Application US/10672866
; Publication No. US20050019915A1
; GENERAL INFORMATION:
;  APPLICANT: C. Frank Bennett
;  APPLICANT:  Kenneth Dobie
;  TITLE OF INVENTION: ANTISENSE MODULATION OF SUPEROXIDE DISMUTASE 1,
;  TITLE OF INVENTION:  SOLUBLE
;  TITLE OF INVENTION:  EXPRESSION
;  FILE REFERENCE: RTS-0242
;  CURRENT APPLICATION NUMBER: US/10/672,866
;  CURRENT FILING DATE:  2003-09-26
;  PRIOR APPLICATION NUMBER: 10/633,843
;  PRIOR FILING DATE: 2003-08-04
;  PRIOR APPLICATION NUMBER: 09/888,360
;  PRIOR FILING DATE: 2001-06-21
;  NUMBER OF SEQ ID NOS: 339
; SEQ ID NO 127
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Antisense Oligonucleotide
US-10-672-866-127

  Query Match             2.3%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 79;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        457 AAATGAAGAAAGTACAAAGA 476
              ||||||||||||||||||||
Db         20 AAATGAAGAAAGTACAAAGA 1


RESULT 200
US-10-672-866-128/c
; Sequence 128, Application US/10672866
; Publication No. US20050019915A1
; GENERAL INFORMATION:
;  APPLICANT: C. Frank Bennett
;  APPLICANT:  Kenneth Dobie
;  TITLE OF INVENTION: ANTISENSE MODULATION OF SUPEROXIDE DISMUTASE 1,
;  TITLE OF INVENTION:  SOLUBLE
;  TITLE OF INVENTION:  EXPRESSION
;  FILE REFERENCE: RTS-0242
;  CURRENT APPLICATION NUMBER: US/10/672,866
;  CURRENT FILING DATE:  2003-09-26
;  PRIOR APPLICATION NUMBER: 10/633,843
;  PRIOR FILING DATE: 2003-08-04
;  PRIOR APPLICATION NUMBER: 09/888,360
;  PRIOR FILING DATE: 2001-06-21
;  NUMBER OF SEQ ID NOS: 339
; SEQ ID NO 128
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
```

```
;   OTHER INFORMATION: Antisense Oligonucleotide
US-10-672-866-128

  Query Match             2.3%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 79;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        458 AATGAAGAAAGTACAAAGAC 477
              ||||||||||||||||||||
Db         20 AATGAAGAAAGTACAAAGAC 1


RESULT 201
US-10-672-866-129/c
; Sequence 129, Application US/10672866
; Publication No. US20050019915A1
; GENERAL INFORMATION:
;  APPLICANT: C. Frank Bennett
;  APPLICANT:  Kenneth Dobie
;  TITLE OF INVENTION: ANTISENSE MODULATION OF SUPEROXIDE DISMUTASE 1,
;  TITLE OF INVENTION:  SOLUBLE
;  TITLE OF INVENTION:  EXPRESSION
;  FILE REFERENCE: RTS-0242
;  CURRENT APPLICATION NUMBER: US/10/672,866
;  CURRENT FILING DATE:  2003-09-26
;  PRIOR APPLICATION NUMBER: 10/633,843
;  PRIOR FILING DATE: 2003-08-04
;  PRIOR APPLICATION NUMBER: 09/888,360
;  PRIOR FILING DATE: 2001-06-21
;  NUMBER OF SEQ ID NOS: 339
; SEQ ID NO 129
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Antisense Oligonucleotide
US-10-672-866-129

  Query Match             2.3%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 79;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        127 CGAGCAGAAGGAAAGTAATG 146
              ||||||||||||||||||||
Db         20 CGAGCAGAAGGAAAGTAATG 1


RESULT 202
US-10-672-866-130/c
; Sequence 130, Application US/10672866
; Publication No. US20050019915A1
; GENERAL INFORMATION:
;  APPLICANT: C. Frank Bennett
;  APPLICANT:  Kenneth Dobie
;  TITLE OF INVENTION: ANTISENSE MODULATION OF SUPEROXIDE DISMUTASE 1,
;  TITLE OF INVENTION:  SOLUBLE
;  TITLE OF INVENTION:  EXPRESSION
;  FILE REFERENCE: RTS-0242
;  CURRENT APPLICATION NUMBER: US/10/672,866
;  CURRENT FILING DATE:  2003-09-26
;  PRIOR APPLICATION NUMBER: 10/633,843
;  PRIOR FILING DATE: 2003-08-04
;  PRIOR APPLICATION NUMBER: 09/888,360
;  PRIOR FILING DATE: 2001-06-21
;  NUMBER OF SEQ ID NOS: 339
; SEQ ID NO 130
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Antisense Oligonucleotide
US-10-672-866-130

  Query Match             2.3%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 79;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        294 ATGAAGAGAGGCATGTTGGA 313
              ||||||||||||||||||||
Db         20 ATGAAGAGAGGCATGTTGGA 1


RESULT 203
US-10-672-866-138/c
; Sequence 138, Application US/10672866
; Publication No. US20050019915A1
; GENERAL INFORMATION:
;  APPLICANT: C. Frank Bennett
;  APPLICANT:  Kenneth Dobie
;  TITLE OF INVENTION: ANTISENSE MODULATION OF SUPEROXIDE DISMUTASE 1,
;  TITLE OF INVENTION:  SOLUBLE
;  TITLE OF INVENTION:  EXPRESSION
;  FILE REFERENCE: RTS-0242
;  CURRENT APPLICATION NUMBER: US/10/672,866
;  CURRENT FILING DATE:  2003-09-26
;  PRIOR APPLICATION NUMBER: 10/633,843
;  PRIOR FILING DATE: 2003-08-04
;  PRIOR APPLICATION NUMBER: 09/888,360
;  PRIOR FILING DATE: 2001-06-21
;  NUMBER OF SEQ ID NOS: 339
; SEQ ID NO 138
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Antisense Oligonucleotide
US-10-672-866-138

  Query Match             2.3%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 79;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        849 TGAGGCTATTAAAAGAATCC 868
              ||||||||||||||||||||
Db         20 TGAGGCTATTAAAAGAATCC 1


RESULT 204
US-10-672-866-168/c
; Sequence 168, Application US/10672866
; Publication No. US20050019915A1
; GENERAL INFORMATION:
;  APPLICANT: C. Frank Bennett
;  APPLICANT:  Kenneth Dobie
;  TITLE OF INVENTION: ANTISENSE MODULATION OF SUPEROXIDE DISMUTASE 1,
;  TITLE OF INVENTION:  SOLUBLE
;  TITLE OF INVENTION:  EXPRESSION
;  FILE REFERENCE: RTS-0242
;  CURRENT APPLICATION NUMBER: US/10/672,866
;  CURRENT FILING DATE:  2003-09-26
;  PRIOR APPLICATION NUMBER: 10/633,843
;  PRIOR FILING DATE: 2003-08-04
;  PRIOR APPLICATION NUMBER: 09/888,360
;  PRIOR FILING DATE: 2001-06-21
;  NUMBER OF SEQ ID NOS: 339
; SEQ ID NO 168
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Antisense Oligonucleotide
US-10-672-866-168

  Query Match             2.3%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 79;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;
```

```
Qy          73 GAAGGCCGTGTGCGTGCTGA 92
               ||||||||||||||||||||
Db          20 GAAGGCCGTGTGCGTGCTGA 1
```

```
RESULT 205
US-10-672-866-169/c
; Sequence 169, Application US/10672866
; Publication No. US20050019915A1
; GENERAL INFORMATION:
;  APPLICANT: C. Frank Bennett
;  APPLICANT:  Kenneth Dobie
;  TITLE OF INVENTION: ANTISENSE MODULATION OF SUPEROXIDE DISMUTASE 1,
;  TITLE OF INVENTION:  SOLUBLE
;  TITLE OF INVENTION:  EXPRESSION
;  FILE REFERENCE: RTS-0242
;  CURRENT APPLICATION NUMBER: US/10/672,866
;  CURRENT FILING DATE:  2003-09-26
;  PRIOR APPLICATION NUMBER: 10/633,843
;  PRIOR FILING DATE: 2003-08-04
;  PRIOR APPLICATION NUMBER: 09/888,360
;  PRIOR FILING DATE: 2001-06-21
;  NUMBER OF SEQ ID NOS: 339
; SEQ ID NO 169
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Antisense Oligonucleotide
US-10-672-866-169

  Query Match             2.3%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 79;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          78 CCGTGTGCGTGCTGAAGGGC 97
               ||||||||||||||||||||
Db          20 CCGTGTGCGTGCTGAAGGGC 1
```

```
RESULT 206
US-10-672-866-170/c
; Sequence 170, Application US/10672866
; Publication No. US20050019915A1
; GENERAL INFORMATION:
;  APPLICANT: C. Frank Bennett
;  APPLICANT:  Kenneth Dobie
;  TITLE OF INVENTION: ANTISENSE MODULATION OF SUPEROXIDE DISMUTASE 1,
;  TITLE OF INVENTION:  SOLUBLE
;  TITLE OF INVENTION:  EXPRESSION
;  FILE REFERENCE: RTS-0242
;  CURRENT APPLICATION NUMBER: US/10/672,866
;  CURRENT FILING DATE:  2003-09-26
;  PRIOR APPLICATION NUMBER: 10/633,843
;  PRIOR FILING DATE: 2003-08-04
;  PRIOR APPLICATION NUMBER: 09/888,360
;  PRIOR FILING DATE: 2001-06-21
;  NUMBER OF SEQ ID NOS: 339
; SEQ ID NO 170
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Antisense Oligonucleotide
US-10-672-866-170

  Query Match             2.3%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 79;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          81 TGTGCGTGCTGAAGGGCGAC 100
               ||||||||||||||||||||
```

```
Db          20 TGTGCGTGCTGAAGGGCGAC 1
```

```
RESULT 207
US-10-672-866-250/c
; Sequence 250, Application US/10672866
; Publication No. US20050019915A1
; GENERAL INFORMATION:
;  APPLICANT: C. Frank Bennett
;  APPLICANT:  Kenneth Dobie
;  TITLE OF INVENTION: ANTISENSE MODULATION OF SUPEROXIDE DISMUTASE 1,
;  TITLE OF INVENTION:  SOLUBLE
;  TITLE OF INVENTION:  EXPRESSION
;  FILE REFERENCE: RTS-0242
;  CURRENT APPLICATION NUMBER: US/10/672,866
;  CURRENT FILING DATE:  2003-09-26
;  PRIOR APPLICATION NUMBER: 10/633,843
;  PRIOR FILING DATE: 2003-08-04
;  PRIOR APPLICATION NUMBER: 09/888,360
;  PRIOR FILING DATE: 2001-06-21
;  NUMBER OF SEQ ID NOS: 339
; SEQ ID NO 250
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Antisense Oligonucleotide
US-10-672-866-250

  Query Match             2.3%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 79;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          75 AGGCCGTGTGCGTGCTGAAG 94
               ||||||||||||||||||||
Db          20 AGGCCGTGTGCGTGCTGAAG 1
```

```
RESULT 208
US-10-672-866-314/c
; Sequence 314, Application US/10672866
; Publication No. US20050019915A1
; GENERAL INFORMATION:
;  APPLICANT: C. Frank Bennett
;  APPLICANT:  Kenneth Dobie
;  TITLE OF INVENTION: ANTISENSE MODULATION OF SUPEROXIDE DISMUTASE 1,
;  TITLE OF INVENTION:  SOLUBLE
;  TITLE OF INVENTION:  EXPRESSION
;  FILE REFERENCE: RTS-0242
;  CURRENT APPLICATION NUMBER: US/10/672,866
;  CURRENT FILING DATE:  2003-09-26
;  PRIOR APPLICATION NUMBER: 10/633,843
;  PRIOR FILING DATE: 2003-08-04
;  PRIOR APPLICATION NUMBER: 09/888,360
;  PRIOR FILING DATE: 2001-06-21
;  NUMBER OF SEQ ID NOS: 339
; SEQ ID NO 314
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Antisense Oligonucleotide
US-10-672-866-314

  Query Match             2.3%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 79;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy         440 GACTTGGGCAAAGGTGGAAA 459
               ||||||||||||||||||||
Db          20 GACTTGGGCAAAGGTGGAAA 1
```

```
RESULT 209
US-10-301-516-29
; Sequence 29, Application US/10301516
; Publication No. US20030180756A1
; GENERAL INFORMATION:
;  APPLICANT: SHI, YANG
;  APPLICANT:  SUI, GUANGCHAO
;  TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR SUPPRESSING EUKARYOTIC GENE
;  TITLE OF INVENTION:  EXPRESSION
;  FILE REFERENCE: HMV-084.01
;  CURRENT APPLICATION NUMBER: US/10/301,516
;  CURRENT FILING DATE:  2002-11-21
;  PRIOR APPLICATION NUMBER: 60/366,478
;  PRIOR FILING DATE: 2002-03-21
;  NUMBER OF SEQ ID NOS: 39
;  SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 29
;   LENGTH: 21
;   TYPE: DNA
;   ORGANISM: Unknown Organism
;   FEATURE:
;   OTHER INFORMATION: Description of Combined DNA/RNA Molecule:
;   OTHER INFORMATION: Unknown wild-type siRNA p9
;   FEATURE:
;   OTHER INFORMATION: Description of Unknown Organism: Unknown
;   OTHER INFORMATION: wild-type siRNA p9
US-10-301-516-29

  Query Match             2.3%;  Score 20;  DB 1;  Length 21;
  Best Local Similarity   80.0%;  Pred. No. 81;
  Matches   16;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        312 GAGACTTGGGCAATGTGACT 331
              |||||::||||||:|:||||
Db          1 GAGACUUGGGCAAUGUGACT 20


RESULT 210
US-10-700-816-9
; Sequence 9, Application US/10700816
; Publication No. US20040192629A1
; GENERAL INFORMATION:
;  APPLICANT: Xu, Zuoshang
;  TITLE OF INVENTION: Allele-Specific RNA Interference
;  FILE REFERENCE: UMY-038
;  CURRENT APPLICATION NUMBER: US/10/700,816
;  CURRENT FILING DATE:  2003-11-04
;  PRIOR APPLICATION NUMBER: 60/423,507
;  PRIOR FILING DATE: 2002-11-04
;  PRIOR APPLICATION NUMBER: 60/488,283
;  PRIOR FILING DATE: 2003-07-18
;  NUMBER OF SEQ ID NOS: 19
;  SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 9
;   LENGTH: 25
;   TYPE: DNA
;   ORGANISM: Homo sapiens
US-10-700-816-9

  Query Match             2.3%;  Score 20;  DB 1;  Length 25;
  Best Local Similarity   80.0%;  Pred. No. 92;
  Matches   16;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        312 GAGACTTGGGCAATGTGACT 331
              |||||::||||||:|:||||
Db          1 GAGACUUGGGCAAUGUGACT 20


RESULT 211
US-10-301-516-17
; Sequence 17, Application US/10301516
; Publication No. US20030180756A1
; GENERAL INFORMATION:
;  APPLICANT: SHI, YANG
;  APPLICANT:  SUI, GUANGCHAO
;  TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR SUPPRESSING EUKARYOTIC GENE
;  TITLE OF INVENTION:  EXPRESSION
;  FILE REFERENCE: HMV-084.01
;  CURRENT APPLICATION NUMBER: US/10/301,516
;  CURRENT FILING DATE:  2002-11-21
;  PRIOR APPLICATION NUMBER: 60/366,478
;  PRIOR FILING DATE: 2002-03-21
;  NUMBER OF SEQ ID NOS: 39
;  SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 17
;   LENGTH: 21
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Description of Artificial Sequence: Synthetic
;   OTHER INFORMATION: target sequence
US-10-301-516-17

  Query Match             2.2%;  Score 19.4;  DB 1;  Length 21;
  Best Local Similarity   95.2%;  Pred. No. 91;
  Matches   20;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        335 GACAAAGATGGTGTGGCCGAT 355
              |||||||||| ||||||||||
Db          1 GACAAAGATGCTGTGGCCGAT 21


RESULT 212
US-10-301-516-18/c
; Sequence 18, Application US/10301516
; Publication No. US20030180756A1
; GENERAL INFORMATION:
;  APPLICANT: SHI, YANG
;  APPLICANT:  SUI, GUANGCHAO
;  TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR SUPPRESSING EUKARYOTIC GENE
;  TITLE OF INVENTION:  EXPRESSION
;  FILE REFERENCE: HMV-084.01
;  CURRENT APPLICATION NUMBER: US/10/301,516
;  CURRENT FILING DATE:  2002-11-21
;  PRIOR APPLICATION NUMBER: 60/366,478
;  PRIOR FILING DATE: 2002-03-21
;  NUMBER OF SEQ ID NOS: 39
;  SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 18
;   LENGTH: 21
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Description of Artificial Sequence: Synthetic
;   OTHER INFORMATION: target sequence
US-10-301-516-18

  Query Match             2.2%;  Score 19.4;  DB 1;  Length 21;
  Best Local Similarity   95.2%;  Pred. No. 91;
  Matches   20;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        335 GACAAAGATGGTGTGGCCGAT 355
              |||||||||| ||||||||||
Db         21 GACAAAGATGCTGTGGCCGAT 1


RESULT 213
US-10-301-516-30
; Sequence 30, Application US/10301516
; Publication No. US20030180756A1
; GENERAL INFORMATION:
;  APPLICANT: SHI, YANG
;  APPLICANT:  SUI, GUANGCHAO
;  TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR SUPPRESSING EUKARYOTIC GENE
;  TITLE OF INVENTION:  EXPRESSION
;  FILE REFERENCE: HMV-084.01
```

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;  CURRENT APPLICATION NUMBER: US/10/301,516
;  CURRENT FILING DATE:  2002-11-21
;  PRIOR APPLICATION NUMBER: 60/366,478
;  PRIOR FILING DATE: 2002-03-21
;  NUMBER OF SEQ ID NOS: 39
;  SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 30
;   LENGTH: 21
;   TYPE: DNA
;   ORGANISM: Unknown Organism
;   FEATURE:
;   OTHER INFORMATION: Description of Combined DNA/RNA Molecule:
;   OTHER INFORMATION: Unknown wild-type siRNA p10
;   FEATURE:
;   OTHER INFORMATION: Description of Unknown Organism: Unknown
;   OTHER INFORMATION: wild-type siRNA p10
US-10-301-516-30

  Query Match             2.2%;  Score 19.4;  DB 1;  Length 21;
  Best Local Similarity   76.2%;  Pred. No. 91;
  Matches   16;  Conservative    4;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        311 GGAGACTTGGGCAATGTGACT 331
              ||||||::||||||:|:|| |
Db          1 GGAGACUUGGGCAAUGUGATT 21


RESULT 214
US-10-301-516-31
; Sequence 31, Application US/10301516
; Publication No. US20030180756A1
; GENERAL INFORMATION:
;  APPLICANT: SHI, YANG
;  APPLICANT:  SUI, GUANGCHAO
;  TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR SUPPRESSING EUKARYOTIC GENE
;  TITLE OF INVENTION:  EXPRESSION
;  FILE REFERENCE: HMV-084.01
;  CURRENT APPLICATION NUMBER: US/10/301,516
;  CURRENT FILING DATE:  2002-11-21
;  PRIOR APPLICATION NUMBER: 60/366,478
;  PRIOR FILING DATE: 2002-03-21
;  NUMBER OF SEQ ID NOS: 39
;  SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 31
;   LENGTH: 21
;   TYPE: DNA
;   ORGANISM: Unknown Organism
;   FEATURE:
;   OTHER INFORMATION: Description of Combined DNA/RNA Molecule:
;   OTHER INFORMATION: Unknown wild-type siRNA p11
;   FEATURE:
;   OTHER INFORMATION: Description of Unknown Organism: Unknown
;   OTHER INFORMATION: wild-type siRNA p11
US-10-301-516-31

  Query Match             2.2%;  Score 19;  DB 1;  Length 21;
  Best Local Similarity   73.7%;  Pred. No. 97;
  Matches   14;  Conservative    5;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        310 TGGAGACTTGGGCAATGTG 328
              :|||||::||||||:|:|
Db          1 UGGAGACUUGGGCAAUGUG 19


RESULT 215
US-10-301-516-37/c
; Sequence 37, Application US/10301516
; Publication No. US20030180756A1
; GENERAL INFORMATION:
;  APPLICANT: SHI, YANG
;  APPLICANT:  SUI, GUANGCHAO
;  TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR SUPPRESSING EUKARYOTIC GENE
;  TITLE OF INVENTION:  EXPRESSION
;  FILE REFERENCE: HMV-084.01
;  CURRENT APPLICATION NUMBER: US/10/301,516
;  CURRENT FILING DATE:  2002-11-21
;  PRIOR APPLICATION NUMBER: 60/366,478
;  PRIOR FILING DATE: 2002-03-21
;  NUMBER OF SEQ ID NOS: 39
;  SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 37
;   LENGTH: 21
;   TYPE: DNA
;   ORGANISM: Unknown Organism
;   FEATURE:
;   OTHER INFORMATION: Description of Combined DNA/RNA Molecule:
;   OTHER INFORMATION: Unknown wild-type siRNA p9
;   FEATURE:
;   OTHER INFORMATION: Description of Unknown Organism: Unknown
;   OTHER INFORMATION: wild-type siRNA p9
US-10-301-516-37

  Query Match             2.2%;  Score 19;  DB 1;  Length 21;
  Best Local Similarity   100.0%;  Pred. No. 97;
  Matches   19;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        312 GAGACTTGGGCAATGTGAC 330
              |||||||||||||||||||
Db         19 GAGACTTGGGCAATGTGAC 1


RESULT 216
US-10-301-516-38/c
; Sequence 38, Application US/10301516
; Publication No. US20030180756A1
; GENERAL INFORMATION:
;  APPLICANT: SHI, YANG
;  APPLICANT:  SUI, GUANGCHAO
;  TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR SUPPRESSING EUKARYOTIC GENE
;  TITLE OF INVENTION:  EXPRESSION
;  FILE REFERENCE: HMV-084.01
;  CURRENT APPLICATION NUMBER: US/10/301,516
;  CURRENT FILING DATE:  2002-11-21
;  PRIOR APPLICATION NUMBER: 60/366,478
;  PRIOR FILING DATE: 2002-03-21
;  NUMBER OF SEQ ID NOS: 39
;  SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 38
;   LENGTH: 21
;   TYPE: DNA
;   ORGANISM: Unknown Organism
;   FEATURE:
;   OTHER INFORMATION: Description of Combined DNA/RNA Molecule:
;   OTHER INFORMATION: Unknown wild-type siRNA p10
;   FEATURE:
;   OTHER INFORMATION: Description of Unknown Organism: Unknown
;   OTHER INFORMATION: wild-type siRNA p10
US-10-301-516-38

  Query Match             2.2%;  Score 19;  DB 1;  Length 21;
  Best Local Similarity   100.0%;  Pred. No. 97;
  Matches   19;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        311 GGAGACTTGGGCAATGTGA 329
              |||||||||||||||||||
Db         19 GGAGACTTGGGCAATGTGA 1


RESULT 217
US-10-301-516-39/c
; Sequence 39, Application US/10301516
; Publication No. US20030180756A1
; GENERAL INFORMATION:
;  APPLICANT: SHI, YANG
;  APPLICANT:  SUI, GUANGCHAO
;  TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR SUPPRESSING EUKARYOTIC GENE
```

```
;  TITLE OF INVENTION:  EXPRESSION
;  FILE REFERENCE: HMV-084.01
;  CURRENT APPLICATION NUMBER: US/10/301,516
;  CURRENT FILING DATE:  2002-11-21
;  PRIOR APPLICATION NUMBER: 60/366,478
;  PRIOR FILING DATE: 2002-03-21
;  NUMBER OF SEQ ID NOS: 39
;  SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 39
;   LENGTH: 21
;   TYPE: DNA
;   ORGANISM: Unknown Organism
;   FEATURE:
;   OTHER INFORMATION: Description of Combined DNA/RNA Molecule:
;   OTHER INFORMATION: Unknown wild-type siRNA p11
;   FEATURE:
;   OTHER INFORMATION: Description of Unknown Organism: Unknown
;   OTHER INFORMATION: wild-type siRNA p11
US-10-301-516-39

  Query Match             2.2%;  Score 19;  DB 1;  Length 21;
  Best Local Similarity   100.0%;  Pred. No. 97;
  Matches   19;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        310 TGGAGACTTGGGCAATGTG 328
              ||||||||||||||||||
Db         19 TGGAGACTTGGGCAATGTG 1


RESULT 218
US-10-672-866-167/c
; Sequence 167, Application US/10672866
; Publication No. US20050019915A1
; GENERAL INFORMATION:
;  APPLICANT: C. Frank Bennett
;  APPLICANT:  Kenneth Dobie
;  TITLE OF INVENTION: ANTISENSE MODULATION OF SUPEROXIDE DISMUTASE 1,
;  TITLE OF INVENTION:  SOLUBLE
;  TITLE OF INVENTION:  EXPRESSION
;  FILE REFERENCE: RTS-0242
;  CURRENT APPLICATION NUMBER: US/10/672,866
;  CURRENT FILING DATE:  2003-09-26
;  PRIOR APPLICATION NUMBER: 10/633,843
;  PRIOR FILING DATE: 2003-08-04
;  PRIOR APPLICATION NUMBER: 09/888,360
;  PRIOR FILING DATE: 2001-06-21
;  NUMBER OF SEQ ID NOS: 339
; SEQ ID NO 167
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Antisense Oligonucleotide
US-10-672-866-167

  Query Match             2.1%;  Score 18.4;  DB 1;  Length 20;
  Best Local Similarity   95.0%;  Pred. No. 1e+02;
  Matches   19;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy         65 ATGGCGACGAAGGCCGTGTG 84
              ||||||| ||||||||||||
Db         20 ATGGCGATGAAGGCCGTGTG 1


RESULT 219
US-10-672-866-171/c
; Sequence 171, Application US/10672866
; Publication No. US20050019915A1
; GENERAL INFORMATION:
;  APPLICANT: C. Frank Bennett
;  APPLICANT:  Kenneth Dobie
;  TITLE OF INVENTION: ANTISENSE MODULATION OF SUPEROXIDE DISMUTASE 1,
;  TITLE OF INVENTION:  SOLUBLE
;  TITLE OF INVENTION:  EXPRESSION
;  FILE REFERENCE: RTS-0242
;  CURRENT APPLICATION NUMBER: US/10/672,866
;  CURRENT FILING DATE:  2003-09-26
;  PRIOR APPLICATION NUMBER: 10/633,843
;  PRIOR FILING DATE: 2003-08-04
;  PRIOR APPLICATION NUMBER: 09/888,360
;  PRIOR FILING DATE: 2001-06-21
;  NUMBER OF SEQ ID NOS: 339
; SEQ ID NO 171
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:.
;   OTHER INFORMATION: Antisense Oligonucleotide
US-10-672-866-171

  Query Match             2.1%;  Score 18.4;  DB 1;  Length 20;
  Best Local Similarity   95.0%;  Pred. No. 1e+02;
  Matches   19;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy         86 GTGCTGAAGGGCGACGGCCC 105
              |||||||||||||||| ||
Db         20 GTGCTGAAGGGCGACGGTCC 1


RESULT 220
US-10-672-866-188/c
; Sequence 188, Application US/10672866
; Publication No. US20050019915A1
; GENERAL INFORMATION:
;  APPLICANT: C. Frank Bennett
;  APPLICANT:  Kenneth Dobie
;  TITLE OF INVENTION: ANTISENSE MODULATION OF SUPEROXIDE DISMUTASE 1,
;  TITLE OF INVENTION:  SOLUBLE
;  TITLE OF INVENTION:  EXPRESSION
;  FILE REFERENCE: RTS-0242
;  CURRENT APPLICATION NUMBER: US/10/672,866
;  CURRENT FILING DATE:  2003-09-26
;  PRIOR APPLICATION NUMBER: 10/633,843
;  PRIOR FILING DATE: 2003-08-04
;  PRIOR APPLICATION NUMBER: 09/888,360
;  PRIOR FILING DATE: 2001-06-21
;  NUMBER OF SEQ ID NOS: 339
; SEQ ID NO 188
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Antisense Oligonucleotide
US-10-672-866-188

  Query Match             2.1%;  Score 18.4;  DB 1;  Length 20;
  Best Local Similarity   95.0%;  Pred. No. 1e+02;
  Matches   19;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        305 CATGTTGGAGACTTGGGCAA 324
              |||||||||||| |||||||
Db         20 CATGTTGGAGACCTGGGCAA 1


RESULT 221
US-10-672-866-189/c
; Sequence 189, Application US/10672866
; Publication No. US20050019915A1
; GENERAL INFORMATION:
;  APPLICANT: C. Frank Bennett
;  APPLICANT:  Kenneth Dobie
;  TITLE OF INVENTION: ANTISENSE MODULATION OF SUPEROXIDE DISMUTASE 1,
;  TITLE OF INVENTION:  SOLUBLE
;  TITLE OF INVENTION:  EXPRESSION
;  FILE REFERENCE: RTS-0242
;  CURRENT APPLICATION NUMBER: US/10/672,866
```

```
;  CURRENT FILING DATE:  2003-09-26
;  PRIOR APPLICATION NUMBER: 10/633,843
;  PRIOR FILING DATE: 2003-08-04
;  PRIOR APPLICATION NUMBER: 09/888,360
;  PRIOR FILING DATE: 2001-06-21
;  NUMBER OF SEQ ID NOS: 339
; SEQ ID NO 189
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Antisense Oligonucleotide
US-10-672-866-189

  Query Match             2.1%;  Score 18.4;  DB 1;  Length 20;
  Best Local Similarity   95.0%;  Pred. No. 1e+02;
  Matches   19;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        308 GTTGGAGACTTGGGCAATGT 327
              ||||||||| ||||||||||
Db         20 GTTGGAGACCTGGGCAATGT 1


RESULT 222
US-10-672-866-249/c
; Sequence 249, Application US/10672866
; Publication No. US20050019915A1
; GENERAL INFORMATION:
;  APPLICANT: C. Frank Bennett
;  APPLICANT:  Kenneth Dobie
;  TITLE OF INVENTION: ANTISENSE MODULATION OF SUPEROXIDE DISMUTASE 1,
;  TITLE OF INVENTION:  SOLUBLE
;  TITLE OF INVENTION:  EXPRESSION
;  FILE REFERENCE: RTS-0242
;  CURRENT APPLICATION NUMBER: US/10/672,866
;  CURRENT FILING DATE:  2003-09-26
;  PRIOR APPLICATION NUMBER: 10/633,843
;  PRIOR FILING DATE: 2003-08-04
;  PRIOR APPLICATION NUMBER: 09/888,360
;  PRIOR FILING DATE: 2001-06-21
;  NUMBER OF SEQ ID NOS: 339
; SEQ ID NO 249
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Antisense Oligonucleotide
US-10-672-866-249

  Query Match             2.1%;  Score 18.4;  DB 1;  Length 20;
  Best Local Similarity   95.0%;  Pred. No. 1e+02;
  Matches   19;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy         70 GACGAAGGCCGTGTGCGTGC 89
              || ||||||||||||||||||
Db         20 GATGAAGGCCGTGTGCGTGC 1


RESULT 223
US-10-672-866-298/c
; Sequence 298, Application US/10672866
; Publication No. US20050019915A1
; GENERAL INFORMATION:
;  APPLICANT: C. Frank Bennett
;  APPLICANT:  Kenneth Dobie
;  TITLE OF INVENTION: ANTISENSE MODULATION OF SUPEROXIDE DISMUTASE 1,
;  TITLE OF INVENTION:  SOLUBLE
;  TITLE OF INVENTION:  EXPRESSION
;  FILE REFERENCE: RTS-0242
;  CURRENT APPLICATION NUMBER: US/10/672,866
;  CURRENT FILING DATE:  2003-09-26
;  PRIOR APPLICATION NUMBER: 10/633,843
;  PRIOR FILING DATE: 2003-08-04
;  PRIOR APPLICATION NUMBER: 09/888,360
;  PRIOR FILING DATE: 2001-06-21
;  NUMBER OF SEQ ID NOS: 339
; SEQ ID NO 298
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Antisense Oligonucleotide
US-10-672-866-298

  Query Match             2.1%;  Score 18.4;  DB 1;  Length 20;
  Best Local Similarity   95.0%;  Pred. No. 1e+02;
  Matches   19;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        512 ATTGGGATCGCCCAATAAAC 531
              |||||||| ||||||||||||
Db         20 ATTGGGATTGCCCAATAAAC 1


RESULT 224
US-10-301-516-26
; Sequence 26, Application US/10301516
; Publication No. US20030180756A1
; GENERAL INFORMATION:
;  APPLICANT: SHI, YANG
;  APPLICANT:  SUI, GUANGCHAO
;  TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR SUPPRESSING EUKARYOTIC GENE
;  TITLE OF INVENTION:  EXPRESSION
;  FILE REFERENCE: HMV-084.01
;  CURRENT APPLICATION NUMBER: US/10/301,516
;  CURRENT FILING DATE:  2002-11-21
;  PRIOR APPLICATION NUMBER: 60/366,478
;  PRIOR FILING DATE: 2002-03-21
;  NUMBER OF SEQ ID NOS: 39
;  SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 26
;   LENGTH: 21
;   TYPE: DNA
;   ORGANISM: Unknown Organism
;   FEATURE:
;   OTHER INFORMATION: Description of Combined DNA/RNA Molecule:
;   OTHER INFORMATION: Unknown mutant siRNA p9
;   FEATURE:
;   OTHER INFORMATION: Description of Unknown Organism: Unknown
;   OTHER INFORMATION: mutant siRNA p9
US-10-301-516-26

  Query Match             2.1%;  Score 18.4;  DB 1;  Length 21;
  Best Local Similarity   75.0%;  Pred. No. 1.1e+02;
  Matches   15;  Conservative    4;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        312 GAGACTTGGGCAATGTGACT 331
              |||||::| ||||:|:||||
Db          1 GAGACUUGCGCAAUGUGACT 20


RESULT 225
US-10-672-866-315/c
; Sequence 315, Application US/10672866
; Publication No. US20050019915A1
; GENERAL INFORMATION:
;  APPLICANT: C. Frank Bennett
;  APPLICANT:  Kenneth Dobie
;  TITLE OF INVENTION: ANTISENSE MODULATION OF SUPEROXIDE DISMUTASE 1,
;  TITLE OF INVENTION:  SOLUBLE
;  TITLE OF INVENTION:  EXPRESSION
;  FILE REFERENCE: RTS-0242
;  CURRENT APPLICATION NUMBER: US/10/672,866
;  CURRENT FILING DATE:  2003-09-26
;  PRIOR APPLICATION NUMBER: 10/633,843
;  PRIOR FILING DATE: 2003-08-04
;  PRIOR APPLICATION NUMBER: 09/888,360
```

```
;  PRIOR FILING DATE: 2001-06-21
;  NUMBER OF SEQ ID NOS: 339
; SEQ ID NO 315
;   LENGTH: 18
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Antisense Oligonucleotide
US-10-672-866-315

  Query Match             2.1%;  Score 18;  DB 1;  Length 18;
  Best Local Similarity   100.0%;  Pred. No. 1e+02;
  Matches   18;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy         77 GCCGTGTGCGTGCTGAAG 94
              ||||||||||||||||||
Db         18 GCCGTGTGCGTGCTGAAG 1


RESULT 226
US-10-301-516-25
; Sequence 25, Application US/10301516
; Publication No. US20030180756A1
; GENERAL INFORMATION:
;  APPLICANT: SHI, YANG
;  APPLICANT:  SUI, GUANGCHAO
;  TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR SUPPRESSING EUKARYOTIC GENE
;  TITLE OF INVENTION:  EXPRESSION
;  FILE REFERENCE: HMV-084.01
;  CURRENT APPLICATION NUMBER: US/10/301,516
;  CURRENT FILING DATE:  2002-11-21
;  PRIOR APPLICATION NUMBER: 60/366,478
;  PRIOR FILING DATE: 2002-03-21
;  NUMBER OF SEQ ID NOS: 39
;  SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 25
;   LENGTH: 21
;   TYPE: DNA
;   ORGANISM: Unknown Organism
;   FEATURE:
;   OTHER INFORMATION: Description of Combined DNA/RNA Molecule:
;   OTHER INFORMATION: Unknown mutant siRNA p10
;   FEATURE:
;   OTHER INFORMATION: Description of Unknown Organism: Unknown
;   OTHER INFORMATION: mutant siRNA p10
US-10-301-516-25

  Query Match             2.0%;  Score 17.8;  DB 1;  Length 21;
  Best Local Similarity   71.4%;  Pred. No. 1.2e+02;
  Matches   15;  Conservative    4;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        311 GGAGACTTGGGCAATGTGACT 331
              ||||||::| ||||:|:|| |
Db          1 GGAGACUUGCGCAAUGUGATT 21


RESULT 227
US-10-301-516-15
; Sequence 15, Application US/10301516
; Publication No. US20030180756A1
; GENERAL INFORMATION:
;  APPLICANT: SHI, YANG
;  APPLICANT:  SUI, GUANGCHAO
;  TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR SUPPRESSING EUKARYOTIC GENE
;  TITLE OF INVENTION:  EXPRESSION
;  FILE REFERENCE: HMV-084.01
;  CURRENT APPLICATION NUMBER: US/10/301,516
;  CURRENT FILING DATE:  2002-11-21
;  PRIOR APPLICATION NUMBER: 60/366,478
;  PRIOR FILING DATE: 2002-03-21
;  NUMBER OF SEQ ID NOS: 39
;  SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 15
;   LENGTH: 19
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Description of Artificial Sequence: Synthetic
;   OTHER INFORMATION: target sequence
US-10-301-516-15

  Query Match             2.0%;  Score 17.4;  DB 1;  Length 19;
  Best Local Similarity   94.7%;  Pred. No. 1.2e+02;
  Matches   18;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        311 GGAGACTTGGGCAATGTGA 329
              ||||||||| |||||||||
Db          1 GGAGACTTGCGCAATGTGA 19


RESULT 228
US-10-301-516-16/c
; Sequence 16, Application US/10301516
; Publication No. US20030180756A1
; GENERAL INFORMATION:
;  APPLICANT: SHI, YANG
;  APPLICANT:  SUI, GUANGCHAO
;  TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR SUPPRESSING EUKARYOTIC GENE
;  TITLE OF INVENTION:  EXPRESSION
;  FILE REFERENCE: HMV-084.01
;  CURRENT APPLICATION NUMBER: US/10/301,516
;  CURRENT FILING DATE:  2002-11-21
;  PRIOR APPLICATION NUMBER: 60/366,478
;  PRIOR FILING DATE: 2002-03-21
;  NUMBER OF SEQ ID NOS: 39
;  SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 16
;   LENGTH: 19
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Description of Artificial Sequence: Synthetic
;   OTHER INFORMATION: target sequence
US-10-301-516-16

  Query Match             2.0%;  Score 17.4;  DB 1;  Length 19;
  Best Local Similarity   94.7%;  Pred. No. 1.2e+02;
  Matches   18;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        311 GGAGACTTGGGCAATGTGA 329
              ||||||||| |||||||||
Db         19 GGAGACTTGCGCAATGTGA 1


RESULT 229
US-10-672-866-286/c
; Sequence 286, Application US/10672866
; Publication No. US20050019915A1
; GENERAL INFORMATION:
;  APPLICANT: C. Frank Bennett
;  APPLICANT:  Kenneth Dobie
;  TITLE OF INVENTION: ANTISENSE MODULATION OF SUPEROXIDE DISMUTASE 1,
;  TITLE OF INVENTION:  SOLUBLE
;  TITLE OF INVENTION:  EXPRESSION
;  FILE REFERENCE: RTS-0242
;  CURRENT APPLICATION NUMBER: US/10/672,866
;  CURRENT FILING DATE:  2003-09-26
;  PRIOR APPLICATION NUMBER: 10/633,843
;  PRIOR FILING DATE: 2003-08-04
;  PRIOR APPLICATION NUMBER: 09/888,360
;  PRIOR FILING DATE: 2001-06-21
;  NUMBER OF SEQ ID NOS: 339
; SEQ ID NO 286
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
```

```
;   FEATURE:
;   OTHER INFORMATION: Antisense Oligonucleotide
US-10-672-866-286

  Query Match             2.0%;  Score 17.4;  DB 1;  Length 20;
  Best Local Similarity   94.7%;  Pred. No. 1.2e+02;
  Matches   18;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        310 TGGAGACTTGGGCAATGTG 328
              ||||||| ||||||||||
Db         20 TGGAGACCTGGGCAATGTG 2


RESULT 230
US-10-301-516-24
; Sequence 24, Application US/10301516
; Publication No. US20030180756A1
; GENERAL INFORMATION:
;  APPLICANT: SHI, YANG
;  APPLICANT:  SUI, GUANGCHAO
;  TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR SUPPRESSING EUKARYOTIC GENE
;  TITLE OF INVENTION:  EXPRESSION
;  FILE REFERENCE: HMV-084.01
;  CURRENT APPLICATION NUMBER: US/10/301,516
;  CURRENT FILING DATE:  2002-11-21
;  PRIOR APPLICATION NUMBER: 60/366,478
;  PRIOR FILING DATE: 2002-03-21
;  NUMBER OF SEQ ID NOS: 39
;  SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 24
;   LENGTH: 21
;   TYPE: DNA
;   ORGANISM: Unknown Organism
;   FEATURE:
;   OTHER INFORMATION: Description of Combined DNA/RNA Molecule:
;   OTHER INFORMATION: Unknown mutant siRNA p11
;   FEATURE:
;   OTHER INFORMATION: Description of Unknown Organism: Unknown
;   OTHER INFORMATION: mutant siRNA p11
US-10-301-516-24

  Query Match             2.0%;  Score 17.4;  DB 1;  Length 21;
  Best Local Similarity   68.4%;  Pred. No. 1.3e+02;
  Matches   13;  Conservative    5;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        310 TGGAGACTTGGGCAATGTG 328
              :|||||::| ||||:|:|
Db          1 UGGAGACUUGCGCAAUGUG 19


RESULT 231
US-10-301-516-34/c
; Sequence 34, Application US/10301516
; Publication No. US20030180756A1
; GENERAL INFORMATION:
;  APPLICANT: SHI, YANG
;  APPLICANT:  SUI, GUANGCHAO
;  TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR SUPPRESSING EUKARYOTIC GENE
;  TITLE OF INVENTION:  EXPRESSION
;  FILE REFERENCE: HMV-084.01
;  CURRENT APPLICATION NUMBER: US/10/301,516
;  CURRENT FILING DATE:  2002-11-21
;  PRIOR APPLICATION NUMBER: 60/366,478
;  PRIOR FILING DATE: 2002-03-21
;  NUMBER OF SEQ ID NOS: 39
;  SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 34
;   LENGTH: 21
;   TYPE: DNA
;   ORGANISM: Unknown Organism
;   FEATURE:
;   OTHER INFORMATION: Description of Combined DNA/RNA Molecule:
;   OTHER INFORMATION: Unknown mutant siRNA p11
;   FEATURE:
;   OTHER INFORMATION: Description of Unknown Organism: Unknown
;   OTHER INFORMATION: mutant siRNA p11
US-10-301-516-34

  Query Match             2.0%;  Score 17.4;  DB 1;  Length 21;
  Best Local Similarity   94.7%;  Pred. No. 1.3e+02;
  Matches   18;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        310 TGGAGACTTGGGCAATGTG 328
              |||||||||| ||||||||
Db         19 TGGAGACTTGCGCAATGTG 1


RESULT 232
US-10-301-516-35/c
; Sequence 35, Application US/10301516
; Publication No. US20030180756A1
; GENERAL INFORMATION:
;  APPLICANT: SHI, YANG
;  APPLICANT:  SUI, GUANGCHAO
;  TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR SUPPRESSING EUKARYOTIC GENE
;  TITLE OF INVENTION:  EXPRESSION
;  FILE REFERENCE: HMV-084.01
;  CURRENT APPLICATION NUMBER: US/10/301,516
;  CURRENT FILING DATE:  2002-11-21
;  PRIOR APPLICATION NUMBER: 60/366,478
;  PRIOR FILING DATE: 2002-03-21
;  NUMBER OF SEQ ID NOS: 39
;  SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 35
;   LENGTH: 21
;   TYPE: DNA
;   ORGANISM: Unknown Organism
;   FEATURE:
;   OTHER INFORMATION: Description of Combined DNA/RNA Molecule:
;   OTHER INFORMATION: Unknown mutant siRNA p10
;   FEATURE:
;   OTHER INFORMATION: Description of Unknown Organism: Unknown
;   OTHER INFORMATION: mutant siRNA p10
US-10-301-516-35

  Query Match             2.0%;  Score 17.4;  DB 1;  Length 21;
  Best Local Similarity   94.7%;  Pred. No. 1.3e+02;
  Matches   18;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        311 GGAGACTTGGGCAATGTGA 329
              ||||||||| |||||||||
Db         19 GGAGACTTGCGCAATGTGA 1


RESULT 233
US-10-301-516-36/c
; Sequence 36, Application US/10301516
; Publication No. US20030180756A1
; GENERAL INFORMATION:
;  APPLICANT: SHI, YANG
;  APPLICANT:  SUI, GUANGCHAO
;  TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR SUPPRESSING EUKARYOTIC GENE
;  TITLE OF INVENTION:  EXPRESSION
;  FILE REFERENCE: HMV-084.01
;  CURRENT APPLICATION NUMBER: US/10/301,516
;  CURRENT FILING DATE:  2002-11-21
;  PRIOR APPLICATION NUMBER: 60/366,478
;  PRIOR FILING DATE: 2002-03-21
;  NUMBER OF SEQ ID NOS: 39
;  SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 36
;   LENGTH: 21
;   TYPE: DNA
;   ORGANISM: Unknown Organism
;   FEATURE:
;   OTHER INFORMATION: Description of Combined DNA/RNA Molecule:
```

```
;   OTHER INFORMATION: Unknown mutant siRNA p9
;   FEATURE:
;   OTHER INFORMATION: Description of Unknown Organism: Unknown
;   OTHER INFORMATION: mutant siRNA p9
US-10-301-516-36

  Query Match             2.0%;  Score 17.4;  DB 1;  Length 21;
  Best Local Similarity   94.7%;  Pred. No. 1.3e+02;
  Matches   18;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        312 GAGACTTGGGCAATGTGAC 330
              ||||||||| ||||||||||
Db         19 GAGACTTGCGCAATGTGAC 1


RESULT 234
US-10-672-866-194/c
; Sequence 194, Application US/10672866
; Publication No. US20050019915A1
; GENERAL INFORMATION:
;  APPLICANT: C. Frank Bennett
;  APPLICANT:  Kenneth Dobie
;  TITLE OF INVENTION: ANTISENSE MODULATION OF SUPEROXIDE DISMUTASE 1,
;  TITLE OF INVENTION:  SOLUBLE
;  TITLE OF INVENTION:  EXPRESSION
;  FILE REFERENCE: RTS-0242
;  CURRENT APPLICATION NUMBER: US/10/672,866
;  CURRENT FILING DATE:  2003-09-26
;  PRIOR APPLICATION NUMBER: 10/633,843
;  PRIOR FILING DATE: 2003-08-04
;  PRIOR APPLICATION NUMBER: 09/888,360
;  PRIOR FILING DATE: 2001-06-21
;  NUMBER OF SEQ ID NOS: 339
; SEQ ID NO 194
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Antisense Oligonucleotide
US-10-672-866-194

  Query Match             1.9%;  Score 16.8;  DB 1;  Length 20;
  Best Local Similarity   90.0%;  Pred. No. 1.4e+02;
  Matches   18;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        345 GTGTGGCCGATGTGTCTATT 364
              |||||||| ||||||| |||
Db         20 GTGTGGCCAATGTGTCCATT 1


RESULT 235
US-10-672-866-195/c
; Sequence 195, Application US/10672866
; Publication No. US20050019915A1
; GENERAL INFORMATION:
;  APPLICANT: C. Frank Bennett
;  APPLICANT:  Kenneth Dobie
;  TITLE OF INVENTION: ANTISENSE MODULATION OF SUPEROXIDE DISMUTASE 1,
;  TITLE OF INVENTION:  SOLUBLE
;  TITLE OF INVENTION:  EXPRESSION
;  FILE REFERENCE: RTS-0242
;  CURRENT APPLICATION NUMBER: US/10/672,866
;  CURRENT FILING DATE:  2003-09-26
;  PRIOR APPLICATION NUMBER: 10/633,843
;  PRIOR FILING DATE: 2003-08-04
;  PRIOR APPLICATION NUMBER: 09/888,360
;  PRIOR FILING DATE: 2001-06-21
;  NUMBER OF SEQ ID NOS: 339
; SEQ ID NO 195
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Antisense Oligonucleotide
US-10-672-866-195

  Query Match             1.9%;  Score 16.8;  DB 1;  Length 20;
  Best Local Similarity   90.0%;  Pred. No. 1.4e+02;
  Matches   18;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        350 GCCGATGTGTCTATTGAAGA 369
              ||| ||||||| ||||||||
Db         20 GCCAATGTGTCCATTGAAGA 1


RESULT 236
US-10-672-866-199/c
; Sequence 199, Application US/10672866
; Publication No. US20050019915A1
; GENERAL INFORMATION:
;  APPLICANT: C. Frank Bennett
;  APPLICANT:  Kenneth Dobie
;  TITLE OF INVENTION: ANTISENSE MODULATION OF SUPEROXIDE DISMUTASE 1,
;  TITLE OF INVENTION:  SOLUBLE
;  TITLE OF INVENTION:  EXPRESSION
;  FILE REFERENCE: RTS-0242
;  CURRENT APPLICATION NUMBER: US/10/672,866
;  CURRENT FILING DATE:  2003-09-26
;  PRIOR APPLICATION NUMBER: 10/633,843
;  PRIOR FILING DATE: 2003-08-04
;  PRIOR APPLICATION NUMBER: 09/888,360
;  PRIOR FILING DATE: 2001-06-21
;  NUMBER OF SEQ ID NOS: 339
; SEQ ID NO 199
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Antisense Oligonucleotide
US-10-672-866-199

  Query Match             1.9%;  Score 16.8;  DB 1;  Length 20;
  Best Local Similarity   90.0%;  Pred. No. 1.4e+02;
  Matches   18;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        392 GACCATTGCATCATTGGCCG 411
              || |||| ||||||||||||
Db         20 GAGCATTCCATCATTGGCCG 1


RESULT 237
US-10-672-866-205/c
; Sequence 205, Application US/10672866
; Publication No. US20050019915A1
; GENERAL INFORMATION:
;  APPLICANT: C. Frank Bennett
;  APPLICANT:  Kenneth Dobie
;  TITLE OF INVENTION: ANTISENSE MODULATION OF SUPEROXIDE DISMUTASE 1,
;  TITLE OF INVENTION:  SOLUBLE
;  TITLE OF INVENTION:  EXPRESSION
;  FILE REFERENCE: RTS-0242
;  CURRENT APPLICATION NUMBER: US/10/672,866
;  CURRENT FILING DATE:  2003-09-26
;  PRIOR APPLICATION NUMBER: 10/633,843
;  PRIOR FILING DATE: 2003-08-04
;  PRIOR APPLICATION NUMBER: 09/888,360
;  PRIOR FILING DATE: 2001-06-21
;  NUMBER OF SEQ ID NOS: 339
; SEQ ID NO 205
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Antisense Oligonucleotide
US-10-672-866-205
```

```
  Query Match             1.9%;  Score 16.8;  DB 1;  Length 20;
  Best Local Similarity   90.0%;  Pred. No. 1.4e+02;
  Matches   18;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        487 TGGAAGTCGTTTGGCTTGTG 506
              |||||| || ||||||||||
Db         20 TGGAAGCCGCTTGGCTTGTG 1


RESULT 238
US-10-672-866-207/c
; Sequence 207, Application US/10672866
; Publication No. US20050019915A1
; GENERAL INFORMATION:
;  APPLICANT: C. Frank Bennett
;  APPLICANT:  Kenneth Dobie
;  TITLE OF INVENTION: ANTISENSE MODULATION OF SUPEROXIDE DISMUTASE 1,
;  TITLE OF INVENTION:  SOLUBLE
;  TITLE OF INVENTION:  EXPRESSION
;  FILE REFERENCE: RTS-0242
;  CURRENT APPLICATION NUMBER: US/10/672,866
;  CURRENT FILING DATE:  2003-09-26
;  PRIOR APPLICATION NUMBER: 10/633,843
;  PRIOR FILING DATE: 2003-08-04
;  PRIOR APPLICATION NUMBER: 09/888,360
;  PRIOR FILING DATE: 2001-06-21
;  NUMBER OF SEQ ID NOS: 339
; SEQ ID NO 207
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Antisense Oligonucleotide
US-10-672-866-207

  Query Match             1.9%;  Score 16.8;  DB 1;  Length 20;
  Best Local Similarity   90.0%;  Pred. No. 1.4e+02;
  Matches   18;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        503 TGTGGTGTAATTGGGATCGC 522
              |||||||| |||||||| ||
Db         20 TGTGGTGTGATTGGGATTGC 1


RESULT 239
US-10-672-866-208/c
; Sequence 208, Application US/10672866
; Publication No. US20050019915A1
; GENERAL INFORMATION:
;  APPLICANT: C. Frank Bennett
;  APPLICANT:  Kenneth Dobie
;  TITLE OF INVENTION: ANTISENSE MODULATION OF SUPEROXIDE DISMUTASE 1,
;  TITLE OF INVENTION:  SOLUBLE
;  TITLE OF INVENTION:  EXPRESSION
;  FILE REFERENCE: RTS-0242
;  CURRENT APPLICATION NUMBER: US/10/672,866
;  CURRENT FILING DATE:  2003-09-26
;  PRIOR APPLICATION NUMBER: 10/633,843
;  PRIOR FILING DATE: 2003-08-04
;  PRIOR APPLICATION NUMBER: 09/888,360
;  PRIOR FILING DATE: 2001-06-21
;  NUMBER OF SEQ ID NOS: 339
; SEQ ID NO 208
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Antisense Oligonucleotide
US-10-672-866-208

  Query Match             1.9%;  Score 16.8;  DB 1;  Length 20;
  Best Local Similarity   90.0%;  Pred. No. 1.4e+02;
  Matches   18;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        506 GGTGTAATTGGGATCGCCCA 525
              ||||| |||||||| |||||
Db         20 GGTGTGATTGGGATTGCCCA 1


RESULT 240
US-10-672-866-209/c
; Sequence 209, Application US/10672866
; Publication No. US20050019915A1
; GENERAL INFORMATION:
;  APPLICANT: C. Frank Bennett
;  APPLICANT:  Kenneth Dobie
;  TITLE OF INVENTION: ANTISENSE MODULATION OF SUPEROXIDE DISMUTASE 1,
;  TITLE OF INVENTION:  SOLUBLE
;  TITLE OF INVENTION:  EXPRESSION
;  FILE REFERENCE: RTS-0242
;  CURRENT APPLICATION NUMBER: US/10/672,866
;  CURRENT FILING DATE:  2003-09-26
;  PRIOR APPLICATION NUMBER: 10/633,843
;  PRIOR FILING DATE: 2003-08-04
;  PRIOR APPLICATION NUMBER: 09/888,360
;  PRIOR FILING DATE: 2001-06-21
;  NUMBER OF SEQ ID NOS: 339
; SEQ ID NO 209
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Antisense Oligonucleotide
US-10-672-866-209

  Query Match             1.9%;  Score 16.8;  DB 1;  Length 20;
  Best Local Similarity   90.0%;  Pred. No. 1.4e+02;
  Matches   18;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        510 TAATTGGGATCGCCCAATAA 529
              | |||||||| |||||||||
Db         20 TGATTGGGATTGCCCAATAA 1


RESULT 241
US-10-672-866-215/c
; Sequence 215, Application US/10672866
; Publication No. US20050019915A1
; GENERAL INFORMATION:
;  APPLICANT: C. Frank Bennett
;  APPLICANT:  Kenneth Dobie
;  TITLE OF INVENTION: ANTISENSE MODULATION OF SUPEROXIDE DISMUTASE 1,
;  TITLE OF INVENTION:  SOLUBLE
;  TITLE OF INVENTION:  EXPRESSION
;  FILE REFERENCE: RTS-0242
;  CURRENT APPLICATION NUMBER: US/10/672,866
;  CURRENT FILING DATE:  2003-09-26
;  PRIOR APPLICATION NUMBER: 10/633,843
;  PRIOR FILING DATE: 2003-08-04
;  PRIOR APPLICATION NUMBER: 09/888,360
;  PRIOR FILING DATE: 2001-06-21
;  NUMBER OF SEQ ID NOS: 339
; SEQ ID NO 215
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Antisense Oligonucleotide
US-10-672-866-215

  Query Match             1.9%;  Score 16.8;  DB 1;  Length 20;
  Best Local Similarity   90.0%;  Pred. No. 1.4e+02;
  Matches   18;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        562 ACTCATCTGTTATCCTGCTA 581
              ||||||||| | ||||||||
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```
Db         20 ACTCATCTGCTGTCCTGCTA 1


RESULT 242
US-10-672-866-287/c
; Sequence 287, Application US/10672866
; Publication No. US20050019915A1
; GENERAL INFORMATION:
;  APPLICANT: C. Frank Bennett
;  APPLICANT:  Kenneth Dobie
;  TITLE OF INVENTION: ANTISENSE MODULATION OF SUPEROXIDE DISMUTASE 1,
;  TITLE OF INVENTION:  SOLUBLE
;  TITLE OF INVENTION:  EXPRESSION
;  FILE REFERENCE: RTS-0242
;  CURRENT APPLICATION NUMBER: US/10/672,866
;  CURRENT FILING DATE:  2003-09-26
;  PRIOR APPLICATION NUMBER: 10/633,843
;  PRIOR FILING DATE: 2003-08-04
;  PRIOR APPLICATION NUMBER: 09/888,360
;  PRIOR FILING DATE: 2001-06-21
;  NUMBER OF SEQ ID NOS: 339
; SEQ ID NO 287
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Antisense Oligonucleotide
US-10-672-866-287

  Query Match             1.9%;  Score 16.8;  DB 1;  Length 20;
  Best Local Similarity   90.0%;  Pred. No. 1.4e+02;
  Matches   18;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        312 GAGACTTGGGCAATGTGACT 331
              ||||| |||||||||||  ||
Db         20 GAGACCTGGGCAATGTGGCT 1


RESULT 243
US-10-672-866-291/c
; Sequence 291, Application US/10672866
; Publication No. US20050019915A1
; GENERAL INFORMATION:
;  APPLICANT: C. Frank Bennett
;  APPLICANT:  Kenneth Dobie
;  TITLE OF INVENTION: ANTISENSE MODULATION OF SUPEROXIDE DISMUTASE 1,
;  TITLE OF INVENTION:  SOLUBLE
;  TITLE OF INVENTION:  EXPRESSION
;  FILE REFERENCE: RTS-0242
;  CURRENT APPLICATION NUMBER: US/10/672,866
;  CURRENT FILING DATE:  2003-09-26
;  PRIOR APPLICATION NUMBER: 10/633,843
;  PRIOR FILING DATE: 2003-08-04
;  PRIOR APPLICATION NUMBER: 09/888,360
;  PRIOR FILING DATE: 2001-06-21
;  NUMBER OF SEQ ID NOS: 339
; SEQ ID NO 291
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Antisense Oligonucleotide
US-10-672-866-291

  Query Match             1.9%;  Score 16.8;  DB 1;  Length 20;
  Best Local Similarity   90.0%;  Pred. No. 1.4e+02;
  Matches   18;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        348 TGGCCGATGTGTCTATTGAA 367
              ||||| ||||||| ||||||
Db         20 TGGCCAATGTGTCCATTGAA 1


RESULT 244
US-10-672-866-296/c
; Sequence 296, Application US/10672866
; Publication No. US20050019915A1
; GENERAL INFORMATION:
;  APPLICANT: C. Frank Bennett
;  APPLICANT:  Kenneth Dobie
;  TITLE OF INVENTION: ANTISENSE MODULATION OF SUPEROXIDE DISMUTASE 1,
;  TITLE OF INVENTION:  SOLUBLE
;  TITLE OF INVENTION:  EXPRESSION
;  FILE REFERENCE: RTS-0242
;  CURRENT APPLICATION NUMBER: US/10/672,866
;  CURRENT FILING DATE:  2003-09-26
;  PRIOR APPLICATION NUMBER: 10/633,843
;  PRIOR FILING DATE: 2003-08-04
;  PRIOR APPLICATION NUMBER: 09/888,360
;  PRIOR FILING DATE: 2001-06-21
;  NUMBER OF SEQ ID NOS: 339
; SEQ ID NO 296
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Antisense Oligonucleotide
US-10-672-866-296

  Query Match             1.9%;  Score 16.8;  DB 1;  Length 20;
  Best Local Similarity   90.0%;  Pred. No. 1.4e+02;
  Matches   18;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        489 GAAGTCGTTTGGCTTGTGGT 508
              |||| || ||||||||||||
Db         20 GAAGCCGCTTGGCTTGTGGT 1


RESULT 245
US-10-672-866-297/c
; Sequence 297, Application US/10672866
; Publication No. US20050019915A1
; GENERAL INFORMATION:
;  APPLICANT: C. Frank Bennett
;  APPLICANT:  Kenneth Dobie
;  TITLE OF INVENTION: ANTISENSE MODULATION OF SUPEROXIDE DISMUTASE 1,
;  TITLE OF INVENTION:  SOLUBLE
;  TITLE OF INVENTION:  EXPRESSION
;  FILE REFERENCE: RTS-0242
;  CURRENT APPLICATION NUMBER: US/10/672,866
;  CURRENT FILING DATE:  2003-09-26
;  PRIOR APPLICATION NUMBER: 10/633,843
;  PRIOR FILING DATE: 2003-08-04
;  PRIOR APPLICATION NUMBER: 09/888,360
;  PRIOR FILING DATE: 2001-06-21
;  NUMBER OF SEQ ID NOS: 339
; SEQ ID NO 297
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Antisense Oligonucleotide
US-10-672-866-297

  Query Match             1.9%;  Score 16.8;  DB 1;  Length 20;
  Best Local Similarity   90.0%;  Pred. No. 1.4e+02;
  Matches   18;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        508 TGTAATTGGGATCGCCCAAT 527
              ||| |||||||| |||||||
Db         20 TGTGATTGGGATTGCCCAAT 1


RESULT 246
US-10-190-366-126
; Sequence 126, Application US/10190366
```

```
; Publication No. US20040006031A1
; GENERAL INFORMATION:
;  APPLICANT: Nicholas M. Dean
;  APPLICANT:  Susan M. Freier
;  APPLICANT:  Kenneth W. Dobie
;  TITLE OF INVENTION: ANTISENSE MODULATION OF HMG-COA REDUCTASE EXPRESSION
;  FILE REFERENCE: PTS-0023
;  CURRENT APPLICATION NUMBER: US/10/190,366
;  CURRENT FILING DATE:  2002-07-02
;  NUMBER OF SEQ ID NOS: 409
; SEQ ID NO 126
;    LENGTH: 20
;    TYPE: DNA
;    ORGANISM: Artificial Sequence
;    FEATURE:
;    OTHER INFORMATION: Antisense Oligonucleotide
US-10-190-366-126

  Query Match             1.9%;  Score 16.4;  DB 1;  Length 20;
  Best Local Similarity   94.4%;  Pred. No. 1.5e+02;
  Matches   17;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        807 TCATTCAAGCCTGTGAAT 824
              ||||||||||||||| |||
Db          3 TCATTCAAGCCTGTCAAT 20


RESULT 247
US-10-190-366-323/c
; Sequence 323, Application US/10190366
; Publication No. US20040006031A1
; GENERAL INFORMATION:
;  APPLICANT: Nicholas M. Dean
;  APPLICANT:  Susan M. Freier
;  APPLICANT:  Kenneth W. Dobie
;  TITLE OF INVENTION: ANTISENSE MODULATION OF HMG-COA REDUCTASE EXPRESSION
;  FILE REFERENCE: PTS-0023
;  CURRENT APPLICATION NUMBER: US/10/190,366
;  CURRENT FILING DATE:  2002-07-02
;  NUMBER OF SEQ ID NOS: 409
; SEQ ID NO 323
;    LENGTH: 20
;    TYPE: DNA
;    ORGANISM: H. sapiens
;    FEATURE:
US-10-190-366-323

  Query Match             1.9%;  Score 16.4;  DB 1;  Length 20;
  Best Local Similarity   94.4%;  Pred. No. 1.5e+02;
  Matches   17;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        807 TCATTCAAGCCTGTGAAT 824
              ||||||||||||||| |||
Db         18 TCATTCAAGCCTGTCAAT 1


RESULT 248
US-10-672-866-159
; Sequence 159, Application US/10672866
; Publication No. US20050019915A1
; GENERAL INFORMATION:
;  APPLICANT: C. Frank Bennett
;  APPLICANT:  Kenneth Dobie
;  TITLE OF INVENTION: ANTISENSE MODULATION OF SUPEROXIDE DISMUTASE 1,
;  TITLE OF INVENTION:  SOLUBLE
;  TITLE OF INVENTION:  EXPRESSION
;  FILE REFERENCE: RTS-0242
;  CURRENT APPLICATION NUMBER: US/10/672,866
;  CURRENT FILING DATE:  2003-09-26
;  PRIOR APPLICATION NUMBER: 10/633,843
;  PRIOR FILING DATE: 2003-08-04
;  PRIOR APPLICATION NUMBER: 09/888,360
;  PRIOR FILING DATE: 2001-06-21
;  NUMBER OF SEQ ID NOS: 339
; SEQ ID NO 159
;    LENGTH: 16
;    TYPE: DNA
;    ORGANISM: Artificial Sequence
;    FEATURE:
;    OTHER INFORMATION: PCR Primer
US-10-672-866-159

  Query Match             1.8%;  Score 16;  DB 1;  Length 16;
  Best Local Similarity   100.0%;  Pred. No. 1.4e+02;
  Matches   16;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy         87 TGCTGAAGGGCGACGG 102
              ||||||||||||||||
Db          1 TGCTGAAGGGCGACGG 16


RESULT 249
US-10-333-429-260/c
; Sequence 260, Application US/10333429
; Publication No. US20040048265A1
; GENERAL INFORMATION:
;  APPLICANT: GENSET
;  TITLE OF INVENTION: Obesity Associated Biallelic Marker Maps
;  FILE REFERENCE: G-083US02PCT
;  CURRENT APPLICATION NUMBER: US/10/333,429
;  CURRENT FILING DATE:  2003-01-17
;  PRIOR APPLICATION NUMBER: PCT/IB01/01477
;  PRIOR FILING DATE: 2001-06-28
;  PRIOR APPLICATION NUMBER: US 60/219,704
;  PRIOR FILING DATE: 2000-07-18
;  NUMBER OF SEQ ID NOS: 579
;  SOFTWARE: Patent.pm
; SEQ ID NO 260
;    LENGTH: 18
;    TYPE: DNA
;    ORGANISM: Homo Sapiens
;    FEATURE:
;    NAME/KEY: primer_bind
;    LOCATION: 1..18
;    OTHER INFORMATION: upstream amplification primer 99-32162 for SEQ 89,
US-10-333-429-260

  Query Match             1.8%;  Score 16;  DB 1;  Length 18;
  Best Local Similarity   100.0%;  Pred. No. 1.5e+02;
  Matches   16;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        153 TGAAGGTGTGGGGAAG 168
              ||||||||||||||||
Db         16 TGAAGGTGTGGGGAAG 1


RESULT 250
US-10-197-280A-27
; Sequence 27, Application US/10197280A
; Publication No. US20030163837A1
; GENERAL INFORMATION:
;  APPLICANT: Aldwinckle, Herbert S.
;  APPLICANT:  Gaitan, Alvaro L.
;  TITLE OF INVENTION: CONSTITUTIVE AND INDUCIBLE PROMOTERS FROM COFFEE PLANTS
;  FILE REFERENCE: 19603/3262
;  CURRENT APPLICATION NUMBER: US/10/197,280A
;  CURRENT FILING DATE:  2002-07-16
;  PRIOR APPLICATION NUMBER: 60/180,934
;  PRIOR FILING DATE: 2000-02-08
;  PRIOR APPLICATION NUMBER: 09/545,686
;  PRIOR FILING DATE: 2000-04-07
;  NUMBER OF SEQ ID NOS: 40
;  SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 27
;    LENGTH: 19
;    TYPE: DNA
```

```
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Description of Artificial Sequence:  Synthetic
;   OTHER INFORMATION: Oligonucleotide Primer
;   FEATURE:
;   NAME/KEY: unsure
;   LOCATION: (5)
;   OTHER INFORMATION: N at any position in this sequence is either A, C,
;   OTHER INFORMATION: G, or T.
US-10-197-280A-27

  Query Match             1.8%;  Score 16;  DB 1;  Length 19;
  Best Local Similarity   88.9%;  Pred. No. 1.5e+02;
  Matches   16;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        195 ATGGATTCCATGTTCATG 212
              |||| |||||||| ||||
Db          1 ATGGNTTCCATGTNCATG 18


RESULT 251
US-10-484-577-356
; Sequence 356, Application US/10484577
; Publication No. US20050032724A1
; GENERAL INFORMATION:
;  APPLICANT: EPIDAUROS Biotechnologie Aktiengesellschaft
;  TITLE OF INVENTION: Means and methods for improved treatment of cancer based on UGT1A
;  FILE REFERENCE: F2285PCT-1
;  CURRENT APPLICATION NUMBER: US/10/484,577
;  CURRENT FILING DATE:  2004-01-22
;  PRIOR APPLICATION NUMBER: PCT/EP 02/08220
;  PRIOR FILING DATE: 2002-07-23
;  PRIOR APPLICATION NUMBER: EP 01 11 7608.8
;  PRIOR FILING DATE: 2001-07-23
;  PRIOR APPLICATION NUMBER: EP 02011710.7
;  PRIOR FILING DATE: 2002-05-24
;  NUMBER OF SEQ ID NOS: 683
;  SOFTWARE: PatentIn version 3.1
; SEQ ID NO 356
;   LENGTH: 17
;   TYPE: DNA
;   ORGANISM: Homo sapiens
;   FEATURE:
;   NAME/KEY: misc_feature
;   LOCATION: (9)..(9)
;   OTHER INFORMATION: r=a or g
US-10-484-577-356

  Query Match             1.8%;  Score 15.6;  DB 1;  Length 17;
  Best Local Similarity   93.8%;  Pred. No. 1.5e+02;
  Matches   15;  Conservative    1;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        321 GCAATGTGACTGCTGA 336
              |||||||:||||||||
Db          2 GCAATGTRACTGCTGA 17


RESULT 252
US-10-672-866-139/c
; Sequence 139, Application US/10672866
; Publication No. US20050019915A1
; GENERAL INFORMATION:
;  APPLICANT: C. Frank Bennett
;  APPLICANT:  Kenneth Dobie
;  TITLE OF INVENTION: ANTISENSE MODULATION OF SUPEROXIDE DISMUTASE 1,
;  TITLE OF INVENTION:  SOLUBLE
;  TITLE OF INVENTION:  EXPRESSION
;  FILE REFERENCE: RTS-0242
;  CURRENT APPLICATION NUMBER: US/10/672,866
;  CURRENT FILING DATE:  2003-09-26
;  PRIOR APPLICATION NUMBER: 10/633,843
;  PRIOR FILING DATE: 2003-08-04
;  PRIOR APPLICATION NUMBER: 09/888,360
;  PRIOR FILING DATE: 2001-06-21
;  NUMBER OF SEQ ID NOS: 339
; SEQ ID NO 139
;   LENGTH: 15
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Antisense Oligonucleotide
US-10-672-866-139

  Query Match             1.7%;  Score 15;  DB 1;  Length 15;
  Best Local Similarity   100.0%;  Pred. No. 1.6e+02;
  Matches   15;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        129 AGCAGAAGGAAAGTA 143
              |||||||||||||||
Db         15 AGCAGAAGGAAAGTA 1


RESULT 253
US-10-672-866-140/c
; Sequence 140, Application US/10672866
; Publication No. US20050019915A1
; GENERAL INFORMATION:
;  APPLICANT: C. Frank Bennett
;  APPLICANT:  Kenneth Dobie
;  TITLE OF INVENTION: ANTISENSE MODULATION OF SUPEROXIDE DISMUTASE 1,
;  TITLE OF INVENTION:  SOLUBLE
;  TITLE OF INVENTION:  EXPRESSION
;  FILE REFERENCE: RTS-0242
;  CURRENT APPLICATION NUMBER: US/10/672,866
;  CURRENT FILING DATE:  2003-09-26
;  PRIOR APPLICATION NUMBER: 10/633,843
;  PRIOR FILING DATE: 2003-08-04
;  PRIOR APPLICATION NUMBER: 09/888,360
;  PRIOR FILING DATE: 2001-06-21
;  NUMBER OF SEQ ID NOS: 339
; SEQ ID NO 140
;   LENGTH: 15
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Antisense Oligonucleotide
US-10-672-866-140

  Query Match             1.7%;  Score 15;  DB 1;  Length 15;
  Best Local Similarity   100.0%;  Pred. No. 1.6e+02;
  Matches   15;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        296 GAAGAGAGGCATGTT 310
              |||||||||||||||
Db         15 GAAGAGAGGCATGTT 1


RESULT 254
US-10-672-866-148/c
; Sequence 148, Application US/10672866
; Publication No. US20050019915A1
; GENERAL INFORMATION:
;  APPLICANT: C. Frank Bennett
;  APPLICANT:  Kenneth Dobie
;  TITLE OF INVENTION: ANTISENSE MODULATION OF SUPEROXIDE DISMUTASE 1,
;  TITLE OF INVENTION:  SOLUBLE
;  TITLE OF INVENTION:  EXPRESSION
;  FILE REFERENCE: RTS-0242
;  CURRENT APPLICATION NUMBER: US/10/672,866
;  CURRENT FILING DATE:  2003-09-26
;  PRIOR APPLICATION NUMBER: 10/633,843
;  PRIOR FILING DATE: 2003-08-04
;  PRIOR APPLICATION NUMBER: 09/888,360
;  PRIOR FILING DATE: 2001-06-21
;  NUMBER OF SEQ ID NOS: 339
; SEQ ID NO 148
```

```
;   LENGTH: 15
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Antisense Oligonucleotide
US-10-672-866-148

  Query Match             1.7%;  Score 15;  DB 1;  Length 15;
  Best Local Similarity   100.0%;  Pred. No. 1.6e+02;
  Matches   15;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        851 AGGCTATTAAAAGAA 865
              |||||||||||||||
Db         15 AGGCTATTAAAAGAA 1


RESULT 255
US-10-484-577-355/c
; Sequence 355, Application US/10484577
; Publication No. US20050032724A1
; GENERAL INFORMATION:
;  APPLICANT: EPIDAUROS Biotechnologie Aktiengesellschaft
;  TITLE OF INVENTION: Means and methods for improved treatment of cancer based on UGT1A
;  FILE REFERENCE: F2285PCT-1
;  CURRENT APPLICATION NUMBER: US/10/484,577
;  CURRENT FILING DATE:  2004-01-22
;  PRIOR APPLICATION NUMBER: PCT/EP 02/08220
;  PRIOR FILING DATE: 2002-07-23
;  PRIOR APPLICATION NUMBER: EP 01 11 7608.8
;  PRIOR FILING DATE: 2001-07-23
;  PRIOR APPLICATION NUMBER: EP 02011710.7
;  PRIOR FILING DATE: 2002-05-24
;  NUMBER OF SEQ ID NOS: 683
;  SOFTWARE: PatentIn version 3.1
; SEQ ID NO 355
;   LENGTH: 17
;   TYPE: DNA
;   ORGANISM: Homo sapiens
;   FEATURE:
;   NAME/KEY: misc_feature
;   LOCATION: (8)..(8)
;   OTHER INFORMATION: y=c or t
US-10-484-577-355

  Query Match             1.7%;  Score 15;  DB 1;  Length 17;
  Best Local Similarity   88.2%;  Pred. No. 1.7e+02;
  Matches   15;  Conservative    1;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        319 GGGCAATGTGACTGCTG 335
              | ||||||| :|||||||
Db         17 GTGCAATGTRACTGCTG 1


RESULT 256
US-09-863-086-102/c
; Sequence 102, Application US/09863086
; Patent No. US20020048762A1
;   GENERAL INFORMATION:
;        APPLICANT: Rossau, Rudi
;        TITLE OF INVENTION: HYBRIDIZATION PROBES DERIVED FROM THE SPACER
;                            REGION BETWEEN THE 16S A
;        NUMBER OF SEQUENCES: 104
;        CORRESPONDENCE ADDRESS:
;             ADDRESSEE: Merchant, Gould, Smith, Edell, Welter & Schmidt
;             STREET: 3100 No. US20020048762A1west Center, 90 S. 7th Street
;             CITY: Minneapolis
;             STATE: MN
;             COUNTRY: U.S.A.
;             ZIP: 55402
;        COMPUTER READABLE FORM:
;             MEDIUM TYPE: Diskette
;             COMPUTER: IBM Compatible
;             OPERATING SYSTEM: DOS
;             SOFTWARE: FastSEQ Version 1.5
;        CURRENT APPLICATION DATA:
;             APPLICATION NUMBER: US/09/863,086
;             FILING DATE: 22-May-2001
;             CLASSIFICATION: <Unknown>
;        PRIOR APPLICATION DATA:
;             APPLICATION NUMBER: 09/312,520
;             FILING DATE: <Unknown>
;             APPLICATION NUMBER: 08/412,614
;             FILING DATE: 29-MAR-1995
;        ATTORNEY/AGENT INFORMATION:
;             NAME: Hillson, Randall A
;             REGISTRATION NUMBER: 31,838
;             REFERENCE/DOCKET NUMBER: 8076.75USC1
;        TELECOMMUNICATION INFORMATION:
;             TELEPHONE: 612/332-5300
;             TELEFAX: 612/332/9081
;             TELEX: <Unknown>
;   INFORMATION FOR SEQ ID NO: 102:
;        SEQUENCE CHARACTERISTICS:
;             LENGTH: 17 base pairs
;             TYPE: nucleic acid
;             STRANDEDNESS: single
;             TOPOLOGY: linear
;        MOLECULE TYPE: Genomic DNA
;        HYPOTHETICAL: NO
;        ANTI-SENSE: NO
;        FRAGMENT TYPE: <Unknown>
;        ORIGINAL SOURCE:
;        SEQUENCE DESCRIPTION: SEQ ID NO: 102:
US-09-863-086-102

  Query Match             1.6%;  Score 14.4;  DB 1;  Length 17;
  Best Local Similarity   93.8%;  Pred. No. 1.9e+02;
  Matches   15;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy         67 GGCGACGAAGGCCGTG 82
              |||||||||| ||||
Db         16 GGCGACGAAGGACGTG 1


RESULT 257
US-09-863-086-104/c
; Sequence 104, Application US/09863086
; Patent No. US20020048762A1
;   GENERAL INFORMATION:
;        APPLICANT: Rossau, Rudi
;        TITLE OF INVENTION: HYBRIDIZATION PROBES DERIVED FROM THE SPACER
;                            REGION BETWEEN THE 16S A
;        NUMBER OF SEQUENCES: 104
;        CORRESPONDENCE ADDRESS:
;             ADDRESSEE: Merchant, Gould, Smith, Edell, Welter & Schmidt
;             STREET: 3100 No. US20020048762A1west Center, 90 S. 7th Street
;             CITY: Minneapolis
;             STATE: MN
;             COUNTRY: U.S.A.
;             ZIP: 55402
;        COMPUTER READABLE FORM:
;             MEDIUM TYPE: Diskette
;             COMPUTER: IBM Compatible
;             OPERATING SYSTEM: DOS
;             SOFTWARE: FastSEQ Version 1.5
;        CURRENT APPLICATION DATA:
;             APPLICATION NUMBER: US/09/863,086
;             FILING DATE: 22-May-2001
;             CLASSIFICATION: <Unknown>
;        PRIOR APPLICATION DATA:
;             APPLICATION NUMBER: 09/312,520
;             FILING DATE: <Unknown>
;             APPLICATION NUMBER: 08/412,614
;             FILING DATE: 29-MAR-1995
;        ATTORNEY/AGENT INFORMATION:
;             NAME: Hillson, Randall A
```

```
;             REGISTRATION NUMBER: 31,838
;             REFERENCE/DOCKET NUMBER: 8076.75USC1
;       TELECOMMUNICATION INFORMATION:
;             TELEPHONE: 612/332-5300
;             TELEFAX: 612/332/9081
;             TELEX: <Unknown>
;   INFORMATION FOR SEQ ID NO: 104:
;       SEQUENCE CHARACTERISTICS:
;             LENGTH: 17 base pairs
;             TYPE: nucleic acid
;             STRANDEDNESS: both
;             TOPOLOGY: both
;       MOLECULE TYPE: Genomic DNA
;       HYPOTHETICAL: NO
;       ANTI-SENSE: NO
;       FRAGMENT TYPE: <Unknown>
;       ORIGINAL SOURCE:
;       SEQUENCE DESCRIPTION: SEQ ID NO: 104:
US-09-863-086-104

  Query Match             1.6%;  Score 14.4;  DB 1;  Length 17;
  Best Local Similarity   93.8%;  Pred. No. 1.9e+02;
  Matches   15;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy         67 GGCGACGAAGGCCGTG 82
              ||||||||||| ||||
Db         16 GGCGACGAAGGACGTG 1


RESULT 258
US-09-780-533A-2234/c
; Sequence 2234, Application US/09780533A
; Publication No. US20030060611A1
; GENERAL INFORMATION:
;  APPLICANT: Ribozyme Pharmaceuticals, Inc.
;  APPLICANT:  Blatt, Larry
;  APPLICANT:  McSwiggen, Jim
;  APPLICANT:  Chowrira, Bharat
;  APPLICANT:  Haeberli, Pete
;  TITLE OF INVENTION: Method and Reagent for the Inhibition of NOGO Gene
;  FILE REFERENCE: MBHB00,878-A (400/011)
;  CURRENT APPLICATION NUMBER: US/09/780,533A
;  CURRENT FILING DATE:  2001-02-09
;  PRIOR APPLICATION NUMBER: US 60/181,797
;  PRIOR FILING DATE: 2000-02-11
;  NUMBER OF SEQ ID NOS: 6679
;  SOFTWARE: PatentIn version 3.0
; SEQ ID NO 2234
;   LENGTH: 17
;   TYPE: RNA
;   ORGANISM: Homo sapiens
US-09-780-533A-2234

  Query Match             1.6%;  Score 14.4;  DB 1;  Length 17;
  Best Local Similarity   93.8%;  Pred. No. 1.9e+02;
  Matches   15;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        857 TTAAAAGAATCCAAAT 872
              |||||||| |||||||
Db         17 TTAAAAGATTCCAAAT 2


RESULT 259
US-09-780-533A-2326
; Sequence 2326, Application US/09780533A
; Publication No. US20030060611A1
; GENERAL INFORMATION:
;  APPLICANT: Ribozyme Pharmaceuticals, Inc.
;  APPLICANT:  Blatt, Larry
;  APPLICANT:  McSwiggen, Jim
;  APPLICANT:  Chowrira, Bharat
;  APPLICANT:  Haeberli, Pete
;  TITLE OF INVENTION: Method and Reagent for the Inhibition of NOGO Gene
;  FILE REFERENCE: MBHB00,878-A (400/011)
;  CURRENT APPLICATION NUMBER: US/09/780,533A
;  CURRENT FILING DATE:  2001-02-09
;  PRIOR APPLICATION NUMBER: US 60/181,797
;  PRIOR FILING DATE: 2000-02-11
;  NUMBER OF SEQ ID NOS: 6679
;  SOFTWARE: PatentIn version 3.0
; SEQ ID NO 2326
;   LENGTH: 17
;   TYPE: RNA
;   ORGANISM: Homo sapiens
US-09-780-533A-2326

  Query Match             1.6%;  Score 14.4;  DB 1;  Length 17;
  Best Local Similarity   68.8%;  Pred. No. 1.9e+02;
  Matches   11;  Conservative    4;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        822 AATAAAAACCCTGTAT 837
              ||:||||| ||:|:|:
Db          1 AAUAAAAAACCUGUAU 16


RESULT 260
US-10-672-238-102/c
; Sequence 102, Application US/10672238
; Publication No. US20040053320A1
;   GENERAL INFORMATION:
;       APPLICANT: Rossau, Rudi
;       TITLE OF INVENTION: HYBRIDIZATION PROBES DERIVED FROM THE SPACER
;                           REGION BETWEEN THE 16S A
;       NUMBER OF SEQUENCES: 104
;       CORRESPONDENCE ADDRESS:
;            ADDRESSEE: Merchant, Gould, Smith, Edell, Welter & Schmidt
;            STREET: 3100 No. US20040053320A1west Center, 90 S. 7th Street
;            CITY: Minneapolis
;            STATE: MN
;            COUNTRY: U.S.A.
;            ZIP: 55402
;       COMPUTER READABLE FORM:
;            MEDIUM TYPE: Diskette
;            COMPUTER: IBM Compatible
;            OPERATING SYSTEM: DOS
;            SOFTWARE: FastSEQ Version 1.5
;       CURRENT APPLICATION DATA:
;            APPLICATION NUMBER: US/10/672,238
;            FILING DATE: 25-Sep-2003
;            CLASSIFICATION: <Unknown>
;       PRIOR APPLICATION DATA:
;            APPLICATION NUMBER: US/09/863,086
;            FILING DATE: <Unknown>
;            APPLICATION NUMBER: 08/412,614
;            FILING DATE: 22-May-2001
;            APPLICATION NUMBER: 09/312,520
;            FILING DATE: <Unknown>
;            APPLICATION NUMBER: 08/412,614
;            FILING DATE: 29-MAR-1995
;       ATTORNEY/AGENT INFORMATION:
;            NAME: Hillson, Randall A
;            REGISTRATION NUMBER: 31,838
;            REFERENCE/DOCKET NUMBER: 8076.75USC1
;       TELECOMMUNICATION INFORMATION:
;            TELEPHONE: 612/332-5300
;            TELEFAX: 612/332/9081
;            TELEX: <Unknown>
;   INFORMATION FOR SEQ ID NO: 102:
;       SEQUENCE CHARACTERISTICS:
;            LENGTH: 17 base pairs
;            TYPE: nucleic acid
;            STRANDEDNESS: single
;            TOPOLOGY: linear
;       MOLECULE TYPE: Genomic DNA
;       HYPOTHETICAL: NO
;       ANTI-SENSE: NO
```

```
;       FRAGMENT TYPE: <Unknown>
;       ORIGINAL SOURCE:
;       SEQUENCE DESCRIPTION: SEQ ID NO: 102:
US-10-672-238-102

  Query Match             1.6%;  Score 14.4;  DB 1;  Length 17;
  Best Local Similarity   93.8%;  Pred. No. 1.9e+02;
  Matches   15;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy         67 GGCGACGAAGGCCGTG 82
              ||||||||||| ||||
Db         16 GGCGACGAAGGACGTG 1


RESULT 261
US-10-672-238-104/c
; Sequence 104, Application US/10672238
; Publication No. US20040053320A1
;   GENERAL INFORMATION:
;       APPLICANT: Rossau, Rudi
;       TITLE OF INVENTION: HYBRIDIZATION PROBES DERIVED FROM THE SPACER
;                           REGION BETWEEN THE 16S A
;       NUMBER OF SEQUENCES: 104
;       CORRESPONDENCE ADDRESS:
;            ADDRESSEE: Merchant, Gould, Smith, Edell, Welter & Schmidt
;            STREET: 3100 No. US20040053320A1west Center, 90 S. 7th Street
;            CITY: Minneapolis
;            STATE: MN
;            COUNTRY: U.S.A.
;            ZIP: 55402
;       COMPUTER READABLE FORM:
;            MEDIUM TYPE: Diskette
;            COMPUTER: IBM Compatible
;            OPERATING SYSTEM: DOS
;            SOFTWARE: FastSEQ Version 1.5
;       CURRENT APPLICATION DATA:
;            APPLICATION NUMBER: US/10/672,238
;            FILING DATE: 25-Sep-2003
;            CLASSIFICATION: <Unknown>
;       PRIOR APPLICATION DATA:
;            APPLICATION NUMBER: US/09/863,086
;            FILING DATE: <Unknown>
;            APPLICATION NUMBER: 08/412,614
;            FILING DATE: 22-May-2001
;            APPLICATION NUMBER: 09/312,520
;            FILING DATE: <Unknown>
;            APPLICATION NUMBER: 08/412,614
;            FILING DATE: 29-MAR-1995
;       ATTORNEY/AGENT INFORMATION:
;            NAME: Hillson, Randall A
;            REGISTRATION NUMBER: 31,838
;            REFERENCE/DOCKET NUMBER: 8076.75USC1
;       TELECOMMUNICATION INFORMATION:
;            TELEPHONE: 612/332-5300
;            TELEFAX: 612/332/9081
;            TELEX: <Unknown>
;   INFORMATION FOR SEQ ID NO: 104:
;       SEQUENCE CHARACTERISTICS:
;            LENGTH: 17 base pairs
;            TYPE: nucleic acid
;            STRANDEDNESS: both
;            TOPOLOGY: both
;       MOLECULE TYPE: Genomic DNA
;       HYPOTHETICAL: NO
;       ANTI-SENSE: NO
;       FRAGMENT TYPE: <Unknown>
;       ORIGINAL SOURCE:
;       SEQUENCE DESCRIPTION: SEQ ID NO: 104:
US-10-672-238-104

  Query Match             1.6%;  Score 14.4;  DB 1;  Length 17;
  Best Local Similarity   93.8%;  Pred. No. 1.9e+02;
  Matches   15;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy         67 GGCGACGAAGGCCGTG 82
              ||||||||||| ||||
Db         16 GGCGACGAAGGACGTG 1


RESULT 262
US-10-484-577-353/c
; Sequence 353, Application US/10484577
; Publication No. US20050032724A1
; GENERAL INFORMATION:
;  APPLICANT: EPIDAUROS Biotechnologie Aktiengesellschaft
;  TITLE OF INVENTION: Means and methods for improved treatment of cancer based on UGT1A1
;  FILE REFERENCE: F2285PCT-1
;  CURRENT APPLICATION NUMBER: US/10/484,577
;  CURRENT FILING DATE:  2004-01-22
;  PRIOR APPLICATION NUMBER: PCT/EP 02/08220
;  PRIOR FILING DATE: 2002-07-23
;  PRIOR APPLICATION NUMBER: EP 01 11 7608.8
;  PRIOR FILING DATE: 2001-07-23
;  PRIOR APPLICATION NUMBER: EP 02011710.7
;  PRIOR FILING DATE: 2002-05-24
;  NUMBER OF SEQ ID NOS: 683
;  SOFTWARE: PatentIn version 3.1
; SEQ ID NO 353
;   LENGTH: 17
;   TYPE: DNA
;   ORGANISM: Homo sapiens
US-10-484-577-353

  Query Match             1.6%;  Score 14.4;  DB 1;  Length 17;
  Best Local Similarity   93.8%;  Pred. No. 1.9e+02;
  Matches   15;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        321 GCAATGTGACTGCTGA 336
              ||||||| ||||||||
Db         16 GCAATGTAACTGCTGA 1


RESULT 263
US-10-484-577-354
; Sequence 354, Application US/10484577
; Publication No. US20050032724A1
; GENERAL INFORMATION:
;  APPLICANT: EPIDAUROS Biotechnologie Aktiengesellschaft
;  TITLE OF INVENTION: Means and methods for improved treatment of cancer based on UGT1A1
;  FILE REFERENCE: F2285PCT-1
;  CURRENT APPLICATION NUMBER: US/10/484,577
;  CURRENT FILING DATE:  2004-01-22
;  PRIOR APPLICATION NUMBER: PCT/EP 02/08220
;  PRIOR FILING DATE: 2002-07-23
;  PRIOR APPLICATION NUMBER: EP 01 11 7608.8
;  PRIOR FILING DATE: 2001-07-23
;  PRIOR APPLICATION NUMBER: EP 02011710.7
;  PRIOR FILING DATE: 2002-05-24
;  NUMBER OF SEQ ID NOS: 683
;  SOFTWARE: PatentIn version 3.1
; SEQ ID NO 354
;   LENGTH: 17
;   TYPE: DNA
;   ORGANISM: Homo sapiens
US-10-484-577-354

  Query Match             1.6%;  Score 14.4;  DB 1;  Length 17;
  Best Local Similarity   93.8%;  Pred. No. 1.9e+02;
  Matches   15;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        321 GCAATGTGACTGCTGA 336
              ||||||| ||||||||
Db          2 GCAATGTAACTGCTGA 17


RESULT 264
```

```
US-09-864-785-2135
; Sequence 2135, Application US/09864785
; Patent No. US20020177568A1
; GENERAL INFORMATION:
;  APPLICANT: Ribozyme Pharmaceuticals, Inc.
;  APPLICANT:  Stinchcomb, Dan
;  APPLICANT:  Draper, Ken
;  APPLICANT:  McSwiggen, Jim
;  TITLE OF INVENTION: Enzymatic Nucleic Acid Treatment of Diseases or Conditions Relate
;  TITLE OF INVENTION:  Levels of NF-Kappa B
;  FILE REFERENCE: 400/022 (MBHB00-812-D)
;  CURRENT APPLICATION NUMBER: US/09/864,785
;  CURRENT FILING DATE:  2001-05-23
;  NUMBER OF SEQ ID NOS: 3929
;  SOFTWARE: PatentIn version 3.0
; SEQ ID NO 2135
;   LENGTH: 17
;   TYPE: RNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Description of Artificial Sequence:  Nucleic Acid
US-09-864-785-2135

  Query Match             1.6%;  Score 14;  DB 1;  Length 17;
  Best Local Similarity   71.4%;  Pred. No. 2e+02;
  Matches   10;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        830 CCCTGTATGGCACT 843
              |||:|:|:|||||:
Db          3 CCCUGUAUGGCACU 16


RESULT 265
US-09-864-785-2949
; Sequence 2949, Application US/09864785
; Patent No. US20020177568A1
; GENERAL INFORMATION:
;  APPLICANT: Ribozyme Pharmaceuticals, Inc.
;  APPLICANT:  Stinchcomb, Dan
;  APPLICANT:  Draper, Ken
;  APPLICANT:  McSwiggen, Jim
;  TITLE OF INVENTION: Enzymatic Nucleic Acid Treatment of Diseases or Conditions Relate
;  TITLE OF INVENTION:  Levels of NF-Kappa B
;  FILE REFERENCE: 400/022 (MBHB00-812-D)
;  CURRENT APPLICATION NUMBER: US/09/864,785
;  CURRENT FILING DATE:  2001-05-23
;  NUMBER OF SEQ ID NOS: 3929
;  SOFTWARE: PatentIn version 3.0
; SEQ ID NO 2949
;   LENGTH: 17
;   TYPE: RNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Description of Artificial Sequence:  Nucleic Acid
US-09-864-785-2949

  Query Match             1.6%;  Score 14;  DB 1;  Length 17;
  Best Local Similarity   71.4%;  Pred. No. 2e+02;
  Matches   10;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        830 CCCTGTATGGCACT 843
              |||:|:|:|||||:
Db          1 CCCUGUAUGGCACU 14


RESULT 266
US-09-780-533A-484/c
; Sequence 484, Application US/09780533A
; Publication No. US20030060611A1
; GENERAL INFORMATION:
;  APPLICANT: Ribozyme Pharmaceuticals, Inc.
;  APPLICANT:  Blatt, Larry
;  APPLICANT:  McSwiggen, Jim
;  APPLICANT:  Chowrira, Bharat
;  APPLICANT:  Haeberli, Pete
;  TITLE OF INVENTION: Method and Reagent for the Inhibition of NOGO Gene
;  FILE REFERENCE: MBHB00,878-A (400/011)
;  CURRENT APPLICATION NUMBER: US/09/780,533A
;  CURRENT FILING DATE:  2001-02-09
;  PRIOR APPLICATION NUMBER: US 60/181,797
;  PRIOR FILING DATE: 2000-02-11
;  NUMBER OF SEQ ID NOS: 6679
;  SOFTWARE: PatentIn version 3.0
; SEQ ID NO 484
;   LENGTH: 17
;   TYPE: RNA
;   ORGANISM: Homo sapiens
US-09-780-533A-484

  Query Match             1.6%;  Score 14;  DB 1;  Length 17;
  Best Local Similarity   100.0%;  Pred. No. 2e+02;
  Matches   14;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        674 TGAGAAACTGATTT 687
              ||||||||||||||
Db         14 TGAGAAACTGATTT 1


RESULT 267
US-09-780-533A-1349/c
; Sequence 1349, Application US/09780533A
; Publication No. US20030060611A1
; GENERAL INFORMATION:
;  APPLICANT: Ribozyme Pharmaceuticals, Inc.
;  APPLICANT:  Blatt, Larry
;  APPLICANT:  McSwiggen, Jim
;  APPLICANT:  Chowrira, Bharat
;  APPLICANT:  Haeberli, Pete
;  TITLE OF INVENTION: Method and Reagent for the Inhibition of NOGO Gene
;  FILE REFERENCE: MBHB00,878-A (400/011)
;  CURRENT APPLICATION NUMBER: US/09/780,533A
;  CURRENT FILING DATE:  2001-02-09
;  PRIOR APPLICATION NUMBER: US 60/181,797
;  PRIOR FILING DATE: 2000-02-11
;  NUMBER OF SEQ ID NOS: 6679
;  SOFTWARE: PatentIn version 3.0
; SEQ ID NO 1349
;   LENGTH: 17
;   TYPE: RNA
;   ORGANISM: Homo sapiens
US-09-780-533A-1349

  Query Match             1.6%;  Score 14;  DB 1;  Length 17;
  Best Local Similarity   100.0%;  Pred. No. 2e+02;
  Matches   14;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        674 TGAGAAACTGATTT 687
              ||||||||||||||
Db         17 TGAGAAACTGATTT 4


RESULT 268
US-09-780-533A-1996/c
; Sequence 1996, Application US/09780533A
; Publication No. US20030060611A1
; GENERAL INFORMATION:
;  APPLICANT: Ribozyme Pharmaceuticals, Inc.
;  APPLICANT:  Blatt, Larry
;  APPLICANT:  McSwiggen, Jim
;  APPLICANT:  Chowrira, Bharat
;  APPLICANT:  Haeberli, Pete
;  TITLE OF INVENTION: Method and Reagent for the Inhibition of NOGO Gene
;  FILE REFERENCE: MBHB00,878-A (400/011)
;  CURRENT APPLICATION NUMBER: US/09/780,533A
;  CURRENT FILING DATE:  2001-02-09
;  PRIOR APPLICATION NUMBER: US 60/181,797
```

```
;  PRIOR FILING DATE: 2000-02-11
;  NUMBER OF SEQ ID NOS: 6679
;  SOFTWARE: PatentIn version 3.0
; SEQ ID NO 1996
;    LENGTH: 17
;    TYPE: RNA
;    ORGANISM: Homo sapiens
US-09-780-533A-1996

  Query Match             1.6%;  Score 14;  DB 1;  Length 17;
  Best Local Similarity   100.0%;  Pred. No. 2e+02;
  Matches   14;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        674 TGAGAAACTGATTT 687
              ||||||||||||||
Db         16 TGAGAAACTGATTT 3


RESULT 269
US-10-633-843-54
; Sequence 54, Application US/10633843
; Publication No. US20040091919A1
; GENERAL INFORMATION:
;  APPLICANT: C. Frank Bennett
;  APPLICANT:  Kenneth Dobie
;  TITLE OF INVENTION: ANTISENSE MODULATION OF SUPEROXIDE DISMUTASE 1, SOLUBLE EXPRESSIO
;  FILE REFERENCE: ISPH-0756
;  CURRENT APPLICATION NUMBER: US/10/633,843
;  CURRENT FILING DATE:  2003-08-04
;  PRIOR APPLICATION NUMBER: US 09/888,360
;  PRIOR FILING DATE: 2001-06-21
;  NUMBER OF SEQ ID NOS: 90
; SEQ ID NO 54
;    LENGTH: 20
;    TYPE: DNA
;    ORGANISM: Artificial Sequence
;    FEATURE:
;    OTHER INFORMATION: Antisense Oligonucleotide
US-10-633-843-54

  Query Match             1.6%;  Score 14;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 2.2e+02;
  Matches   14;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        711 AGTTTTATAAAACT 724
              ||||||||||||||
Db          3 AGTTTTATAAAACT 16


RESULT 270
US-10-633-843-55
; Sequence 55, Application US/10633843
; Publication No. US20040091919A1
; GENERAL INFORMATION:
;  APPLICANT: C. Frank Bennett
;  APPLICANT:  Kenneth Dobie
;  TITLE OF INVENTION: ANTISENSE MODULATION OF SUPEROXIDE DISMUTASE 1, SOLUBLE EXPRESSIO
;  FILE REFERENCE: ISPH-0756
;  CURRENT APPLICATION NUMBER: US/10/633,843
;  CURRENT FILING DATE:  2003-08-04
;  PRIOR APPLICATION NUMBER: US 09/888,360
;  PRIOR FILING DATE: 2001-06-21
;  NUMBER OF SEQ ID NOS: 90
; SEQ ID NO 55
;    LENGTH: 20
;    TYPE: DNA
;    ORGANISM: Artificial Sequence
;    FEATURE:
;    OTHER INFORMATION: Antisense Oligonucleotide
US-10-633-843-55

  Query Match             1.6%;  Score 14;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 2.2e+02;
  Matches   14;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        711 AGTTTTATAAAACT 724
              ||||||||||||||
Db          6 AGTTTTATAAAACT 19


RESULT 271
US-10-672-866-54
; Sequence 54, Application US/10672866
; Publication No. US20050019915A1
; GENERAL INFORMATION:
;  APPLICANT: C. Frank Bennett
;  APPLICANT:  Kenneth Dobie
;  TITLE OF INVENTION: ANTISENSE MODULATION OF SUPEROXIDE DISMUTASE 1,
;  TITLE OF INVENTION:  SOLUBLE
;  TITLE OF INVENTION:  EXPRESSION
;  FILE REFERENCE: RTS-0242
;  CURRENT APPLICATION NUMBER: US/10/672,866
;  CURRENT FILING DATE:  2003-09-26
;  PRIOR APPLICATION NUMBER: 10/633,843
;  PRIOR FILING DATE: 2003-08-04
;  PRIOR APPLICATION NUMBER: 09/888,360
;  PRIOR FILING DATE: 2001-06-21
;  NUMBER OF SEQ ID NOS: 339
; SEQ ID NO 54
;    LENGTH: 20
;    TYPE: DNA
;    ORGANISM: Artificial Sequence
;    FEATURE:
;    OTHER INFORMATION: Antisense Oligonucleotide
US-10-672-866-54

  Query Match             1.6%;  Score 14;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 2.2e+02;
  Matches   14;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        711 AGTTTTATAAAACT 724
              ||||||||||||||
Db          3 AGTTTTATAAAACT 16


RESULT 272
US-10-672-866-55
; Sequence 55, Application US/10672866
; Publication No. US20050019915A1
; GENERAL INFORMATION:
;  APPLICANT: C. Frank Bennett
;  APPLICANT:  Kenneth Dobie
;  TITLE OF INVENTION: ANTISENSE MODULATION OF SUPEROXIDE DISMUTASE 1,
;  TITLE OF INVENTION:  SOLUBLE
;  TITLE OF INVENTION:  EXPRESSION
;  FILE REFERENCE: RTS-0242
;  CURRENT APPLICATION NUMBER: US/10/672,866
;  CURRENT FILING DATE:  2003-09-26
;  PRIOR APPLICATION NUMBER: 10/633,843
;  PRIOR FILING DATE: 2003-08-04
;  PRIOR APPLICATION NUMBER: 09/888,360
;  PRIOR FILING DATE: 2001-06-21
;  NUMBER OF SEQ ID NOS: 339
; SEQ ID NO 55
;    LENGTH: 20
;    TYPE: DNA
;    ORGANISM: Artificial Sequence
;    FEATURE:
;    OTHER INFORMATION: Antisense Oligonucleotide
US-10-672-866-55

  Query Match             1.6%;  Score 14;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 2.2e+02;
  Matches   14;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        711 AGTTTTATAAAACT 724
```

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                    ||||||||||||||
Db          6 AGTTTTATAAAACT 19


RESULT 273
US-09-866-108-8960
; Sequence 8960, Application US/09866108
; Patent No. US20020048800A1
; GENERAL INFORMATION:
;  APPLICANT: GU, Yizhong
;  APPLICANT:  JI, Yonggang
;  APPLICANT:  PENN, Sharron G.
;  APPLICANT:  HANZEL, David K.
;  APPLICANT:  RANK, David R.
;  APPLICANT:  CHEN, Wensheng
;  APPLICANT:  SHANNON, Mark
;  TITLE OF INVENTION: MYOSIN-LIKE GENE EXPRESSED IN HUMAN HEART AND MUSCLE
;  FILE REFERENCE: AEOMICA-7
;  CURRENT APPLICATION NUMBER: US/09/866,108
;  CURRENT FILING DATE:  2001-05-25
;  PRIOR APPLICATION NUMBER: US 60/207,456
;  PRIOR FILING DATE: 2000-05-26
;  PRIOR APPLICATION NUMBER: GB 24263.6
;  PRIOR FILING DATE: 2000-10-04
;  PRIOR APPLICATION NUMBER: US 60/236,359
;  PRIOR FILING DATE: 2000-09-27
;  PRIOR APPLICATION NUMBER: PCT/US01/00666
;  PRIOR FILING DATE: 2001-01-30
;  PRIOR APPLICATION NUMBER: PCT/US01/00667
;  PRIOR FILING DATE: 2001-01-30
;  PRIOR APPLICATION NUMBER: PCT/US01/00664
;  PRIOR FILING DATE: 2001-01-30
;  PRIOR APPLICATION NUMBER: PCT/US01/00669
;  PRIOR FILING DATE: 2001-01-30
;  PRIOR APPLICATION NUMBER: PCT/US01/00665
;  PRIOR FILING DATE: 2001-01-30
;  PRIOR APPLICATION NUMBER: PCT/US01/00668
;  PRIOR FILING DATE: 2001-01-30
;  PRIOR APPLICATION NUMBER: PCT/US01/00663
;  PRIOR FILING DATE: 2001-01-30
;  PRIOR APPLICATION NUMBER: PCT/US01/00662
;  PRIOR FILING DATE: 2001-01-30
;  PRIOR APPLICATION NUMBER: PCT/US01/00661
;  PRIOR FILING DATE: 2001-01-30
;  PRIOR APPLICATION NUMBER: PCT/US01/00670
;  PRIOR FILING DATE: 2001-01-30
;  PRIOR APPLICATION NUMBER: US 60/234,687
;  PRIOR FILING DATE: 2000-09-21
;  PRIOR APPLICATION NUMBER: US 60/266,860
;  PRIOR FILING DATE: 2001-02-05
;  NUMBER OF SEQ ID NOS: 15752
;  SOFTWARE: Aeomica Sequence Listing Engine
; SEQ ID NO 8960
;   LENGTH: 17
;   TYPE: DNA
;   ORGANISM: Homo sapiens
US-09-866-108-8960

  Query Match             1.6%;  Score 13.8;  DB 1;  Length 17;
  Best Local Similarity   88.2%;  Pred. No. 2.1e+02;
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        183 CTGAAGGCCTGCATGGA 199
              |||||||||  ||||||
Db          1 CTGAAGGCCGACATGGA 17


RESULT 274
US-09-818-875-3142
; Sequence 3142, Application US/09818875
; Publication No. US20030051270A1
; GENERAL INFORMATION:
;  APPLICANT: Kmiec, Eric B.
;  APPLICANT:  Gamper, Howard B.
;  APPLICANT:  Rice, Michael C.
;  TITLE OF INVENTION: Targeted Chromosomal Genomic Alterations with Modified Single
;  TITLE OF INVENTION:  Stranded Oligonucleotides
;  FILE REFERENCE: Napro-4
;  CURRENT APPLICATION NUMBER: US/09/818,875
;  CURRENT FILING DATE:  2001-03-27
;  PRIOR APPLICATION NUMBER: US 60/192,176
;  PRIOR FILING DATE: 2000-03-27
;  PRIOR APPLICATION NUMBER: US 60/192,179
;  PRIOR FILING DATE: 2000-03-27
;  PRIOR APPLICATION NUMBER: US 60/208,538
;  PRIOR FILING DATE: 2000-06-01
;  PRIOR APPLICATION NUMBER: US 60/244,989
;  PRIOR FILING DATE: 2000-10-30
;  NUMBER OF SEQ ID NOS: 4385
;  SOFTWARE: Friedman macro Napro4
; SEQ ID NO 3142
;   LENGTH: 17
;   TYPE: DNA
;   ORGANISM: Homo sapiens
US-09-818-875-3142

  Query Match             1.6%;  Score 13.8;  DB 1;  Length 17;
  Best Local Similarity   88.2%;  Pred. No. 2.1e+02;
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        676 AGAAACTGATTTATGAT 692
              ||| ||| |||||||||
Db          1 AGATACTCATTTATGAT 17


RESULT 275
US-09-818-875-3143/c
; Sequence 3143, Application US/09818875
; Publication No. US20030051270A1
; GENERAL INFORMATION:
;  APPLICANT: Kmiec, Eric B.
;  APPLICANT:  Gamper, Howard B.
;  APPLICANT:  Rice, Michael C.
;  TITLE OF INVENTION: Targeted Chromosomal Genomic Alterations with Modified Single
;  TITLE OF INVENTION:  Stranded Oligonucleotides
;  FILE REFERENCE: Napro-4
;  CURRENT APPLICATION NUMBER: US/09/818,875
;  CURRENT FILING DATE:  2001-03-27
;  PRIOR APPLICATION NUMBER: US 60/192,176
;  PRIOR FILING DATE: 2000-03-27
;  PRIOR APPLICATION NUMBER: US 60/192,179
;  PRIOR FILING DATE: 2000-03-27
;  PRIOR APPLICATION NUMBER: US 60/208,538
;  PRIOR FILING DATE: 2000-06-01
;  PRIOR APPLICATION NUMBER: US 60/244,989
;  PRIOR FILING DATE: 2000-10-30
;  NUMBER OF SEQ ID NOS: 4385
;  SOFTWARE: Friedman macro Napro4
; SEQ ID NO 3143
;   LENGTH: 17
;   TYPE: DNA
;   ORGANISM: Homo sapiens
US-09-818-875-3143

  Query Match             1.6%;  Score 13.8;  DB 1;  Length 17;
  Best Local Similarity   88.2%;  Pred. No. 2.1e+02;
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        676 AGAAACTGATTTATGAT 692
              ||| ||| |||||||||
Db         17 AGATACTCATTTATGAT 1


RESULT 276
US-09-780-533A-1097/c
; Sequence 1097, Application US/09780533A
```

```
; Publication No. US20030060611A1
; GENERAL INFORMATION:
;  APPLICANT: Ribozyme Pharmaceuticals, Inc.
;  APPLICANT:  Blatt, Larry
;  APPLICANT:  McSwiggen, Jim
;  APPLICANT:  Chowrira, Bharat
;  APPLICANT:  Haeberli, Pete
;  TITLE OF INVENTION: Method and Reagent for the Inhibition of NOGO Gene
;  FILE REFERENCE: MBHB00,878-A (400/011)
;  CURRENT APPLICATION NUMBER: US/09/780,533A
;  CURRENT FILING DATE:  2001-02-09
;  PRIOR APPLICATION NUMBER: US 60/181,797
;  PRIOR FILING DATE: 2000-02-11
;  NUMBER OF SEQ ID NOS: 6679
;  SOFTWARE: PatentIn version 3.0
; SEQ ID NO 1097
;   LENGTH: 17
;   TYPE: RNA
;   ORGANISM: Homo sapiens
US-09-780-533A-1097

  Query Match             1.6%;  Score 13.8;  DB 1;  Length 17;
  Best Local Similarity   88.2%;  Pred. No. 2.1e+02;
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        730 AAAATGTCTGTTTCAAT 746
              ||||||| |||| ||||
Db         17 AAAATGTTTGTTGCAAT 1


RESULT 277
US-09-740-332-2757
; Sequence 2757, Application US/09740332
; Publication No. US20030125270A1
; GENERAL INFORMATION:
;  APPLICANT: Ribozyme Pharmaceuticals Inc.
;  TITLE OF INVENTION: Enzymatic Nucleic Acid Treatment of Diseases or Conditions Relate
;  TITLE OF INVENTION:  Hepatitis C Virus Infection
;  FILE REFERENCE: RPI 400/003
;  CURRENT APPLICATION NUMBER: US/09/740,332
;  CURRENT FILING DATE:  2001-03-26
;  NUMBER OF SEQ ID NOS: 9704
;  SOFTWARE: PatentIn version 3.0
; SEQ ID NO 2757
;   LENGTH: 17
;   TYPE: RNA
;   ORGANISM: artificial sequence
;   FEATURE:
;   NAME/KEY: misc_feature
;   LOCATION:
;   OTHER INFORMATION: oligonucleotide substrate
US-09-740-332-2757

  Query Match             1.6%;  Score 13.8;  DB 1;  Length 17;
  Best Local Similarity   82.4%;  Pred. No. 2.1e+02;
  Matches   14;  Conservative    1;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        271 CAGAAAACACGGTGGGC 287
              ||||| ||||||:|| |
Db          1 CAGAAGACACGGUGGAC 17


RESULT 278
US-09-817-879-2757
; Sequence 2757, Application US/09817879
; Publication No. US20030171311A1
; GENERAL INFORMATION:
;  APPLICANT: Ribozyme Pharmaceuticals Inc.
;  TITLE OF INVENTION: Enzymatic Nucleic Acid Treatment of Diseases or Conditions Relate
;  TITLE OF INVENTION:  Hepatitis C Virus Infection
;  FILE REFERENCE: MBHB00-801-F
;  CURRENT APPLICATION NUMBER: US/09/817,879
;  CURRENT FILING DATE:  2001-03-26
;  NUMBER OF SEQ ID NOS: 9703
;  SOFTWARE: PatentIn version 3.0
; SEQ ID NO 2757
;   LENGTH: 17
;   TYPE: RNA
;   ORGANISM: artificial sequence
;   FEATURE:
;   NAME/KEY: misc_feature
;   LOCATION:
;   OTHER INFORMATION: oligonucleotide substrate
US-09-817-879-2757

  Query Match             1.6%;  Score 13.8;  DB 1;  Length 17;
  Best Local Similarity   82.4%;  Pred. No. 2.1e+02;
  Matches   14;  Conservative    1;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        271 CAGAAAACACGGTGGGC 287
              ||||| ||||||:|| |
Db          1 CAGAAGACACGGUGGAC 17


RESULT 279
US-10-230-006-533/c
; Sequence 533, Application US/10230006
; Publication No. US20030191077A1
; GENERAL INFORMATION:
;  APPLICANT: Ribozyme Pharmaceuticals, Inc.
;  APPLICANT:  Fosnaugh, Kathy
;  APPLICANT:  McSwiggen, Jim
;  TITLE OF INVENTION: METHOD AND REAGENT FOR THE TREATMENT OF ASTHMA AND ALLERGIC CONDIT
;  FILE REFERENCE: 400/056 (MBHB01-1110)
;  CURRENT APPLICATION NUMBER: US/10/230,006
;  CURRENT FILING DATE:  2002-11-18
;  PRIOR APPLICATION NUMBER: US 60/315,315
;  PRIOR FILING DATE: 2001-08-28
;  NUMBER OF SEQ ID NOS: 2678
;  SOFTWARE: PatentIn version 3.0
; SEQ ID NO 533
;   LENGTH: 17
;   TYPE: RNA
;   ORGANISM: Homo sapiens
US-10-230-006-533

  Query Match             1.6%;  Score 13.8;  DB 1;  Length 17;
  Best Local Similarity   88.2%;  Pred. No. 2.1e+02;
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy         91 GAAGGGCGACGGCCCAG 107
              ||||||||| ||||| |
Db         17 GAAGGGCGAGGGCCCCG 1


RESULT 280
US-10-230-006-534/c
; Sequence 534, Application US/10230006
; Publication No. US20030191077A1
; GENERAL INFORMATION:
;  APPLICANT: Ribozyme Pharmaceuticals, Inc.
;  APPLICANT:  Fosnaugh, Kathy
;  APPLICANT:  McSwiggen, Jim
;  TITLE OF INVENTION: METHOD AND REAGENT FOR THE TREATMENT OF ASTHMA AND ALLERGIC CONDIT
;  FILE REFERENCE: 400/056 (MBHB01-1110)
;  CURRENT APPLICATION NUMBER: US/10/230,006
;  CURRENT FILING DATE:  2002-11-18
;  PRIOR APPLICATION NUMBER: US 60/315,315
;  PRIOR FILING DATE: 2001-08-28
;  NUMBER OF SEQ ID NOS: 2678
;  SOFTWARE: PatentIn version 3.0
; SEQ ID NO 534
;   LENGTH: 17
;   TYPE: RNA
;   ORGANISM: Homo sapiens
US-10-230-006-534
```

```
  Query Match             1.6%;  Score 13.8;  DB 1;  Length 17;
  Best Local Similarity   88.2%;  Pred. No. 2.1e+02;
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy         87 TGCTGAAGGGCGACGGC 103
              ||| |||||||||| |||
Db         17 TGCGGAAGGGCGAGGGC 1


RESULT 281
US-10-230-006-1258/c
; Sequence 1258, Application US/10230006
; Publication No. US20030191077A1
; GENERAL INFORMATION:
;  APPLICANT: Ribozyme Pharmaceuticals, Inc.
;  APPLICANT:  Fosnaugh, Kathy
;  APPLICANT:  McSwiggen, Jim
;  TITLE OF INVENTION: METHOD AND REAGENT FOR THE TREATMENT OF ASTHMA AND ALLERGIC CONDI
;  FILE REFERENCE: 400/056 (MBHB01-1110)
;  CURRENT APPLICATION NUMBER: US/10/230,006
;  CURRENT FILING DATE:  2002-11-18
;  PRIOR APPLICATION NUMBER: US 60/315,315
;  PRIOR FILING DATE: 2001-08-28
;  NUMBER OF SEQ ID NOS: 2678
;  SOFTWARE: PatentIn version 3.0
; SEQ ID NO 1258
;   LENGTH: 17
;   TYPE: RNA
;   ORGANISM: Homo sapiens
US-10-230-006-1258

  Query Match             1.6%;  Score 13.8;  DB 1;  Length 17;
  Best Local Similarity   88.2%;  Pred. No. 2.1e+02;
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy         89 CTGAAGGGCGACGGCCC 105
              | |||||||||  |||||
Db         17 CGGAAGGGCGAGGGCCC 1


RESULT 282
US-10-209-787-3142
; Sequence 3142, Application US/10209787
; Publication No. US20030217377A1
; GENERAL INFORMATION:
;  APPLICANT: Kmiec, Eric B.
;  APPLICANT:  Gamper, Howard B.
;  APPLICANT:  Rice, Michael C.
;  TITLE OF INVENTION: Targeted Chromosomal Genomic Alterations with Modified Single
;  TITLE OF INVENTION:  Stranded Oligonucleotides
;  FILE REFERENCE: Napro-4
;  CURRENT APPLICATION NUMBER: US/10/209,787
;  CURRENT FILING DATE:  2002-07-30
;  PRIOR APPLICATION NUMBER: US 09/818,875
;  PRIOR FILING DATE: 2001-03-27
;  PRIOR APPLICATION NUMBER: US 60/192,176
;  PRIOR FILING DATE: 2000-03-27
;  PRIOR APPLICATION NUMBER: US 60/192,179
;  PRIOR FILING DATE: 2000-03-27
;  PRIOR APPLICATION NUMBER: US 60/208,538
;  PRIOR FILING DATE: 2000-06-01
;  PRIOR APPLICATION NUMBER: US 60/244,989
;  PRIOR FILING DATE: 2000-10-30
;  NUMBER OF SEQ ID NOS: 4385
;  SOFTWARE: Friedman macro Napro4
; SEQ ID NO 3142
;   LENGTH: 17
;   TYPE: DNA
;   ORGANISM: Homo sapiens
US-10-209-787-3142

  Query Match             1.6%;  Score 13.8;  DB 1;  Length 17;
  Best Local Similarity   88.2%;  Pred. No. 2.1e+02;
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        676 AGAAACTGATTTATGAT 692
              ||| ||| |||||||||
Db          1 AGATACTCATTTATGAT 17


RESULT 283
US-10-209-787-3143/c
; Sequence 3143, Application US/10209787
; Publication No. US20030217377A1
; GENERAL INFORMATION:
;  APPLICANT: Kmiec, Eric B.
;  APPLICANT:  Gamper, Howard B.
;  APPLICANT:  Rice, Michael C.
;  TITLE OF INVENTION: Targeted Chromosomal Genomic Alterations with Modified Single
;  TITLE OF INVENTION:  Stranded Oligonucleotides
;  FILE REFERENCE: Napro-4
;  CURRENT APPLICATION NUMBER: US/10/209,787
;  CURRENT FILING DATE:  2002-07-30
;  PRIOR APPLICATION NUMBER: US 09/818,875
;  PRIOR FILING DATE: 2001-03-27
;  PRIOR APPLICATION NUMBER: US 60/192,176
;  PRIOR FILING DATE: 2000-03-27
;  PRIOR APPLICATION NUMBER: US 60/192,179
;  PRIOR FILING DATE: 2000-03-27
;  PRIOR APPLICATION NUMBER: US 60/208,538
;  PRIOR FILING DATE: 2000-06-01
;  PRIOR APPLICATION NUMBER: US 60/244,989
;  PRIOR FILING DATE: 2000-10-30
;  NUMBER OF SEQ ID NOS: 4385
;  SOFTWARE: Friedman macro Napro4
; SEQ ID NO 3143
;   LENGTH: 17
;   TYPE: DNA
;   ORGANISM: Homo sapiens
US-10-209-787-3143

  Query Match             1.6%;  Score 13.8;  DB 1;  Length 17;
  Best Local Similarity   88.2%;  Pred. No. 2.1e+02;
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        676 AGAAACTGATTTATGAT 692
              ||| ||| |||||||||
Db         17 AGATACTCATTTATGAT 1


RESULT 284
US-10-261-185-3142
; Sequence 3142, Application US/10261185
; Publication No. US20040014057A1
; GENERAL INFORMATION:
;  APPLICANT: Kmiec, Eric B.
;  APPLICANT:  Gamper, Howard B.
;  APPLICANT:  Rice, Michael C.
;  TITLE OF INVENTION: Targeted Chromosomal Genomic Alterations with Modified Single
;  TITLE OF INVENTION:  Stranded Oligonucleotides
;  FILE REFERENCE: NaPro-4CON
;  CURRENT APPLICATION NUMBER: US/10/261,185
;  CURRENT FILING DATE:  2002-09-27
;  PRIOR APPLICATION NUMBER: PCT/US01/09761
;  PRIOR FILING DATE: 2001-03-27
;  PRIOR APPLICATION NUMBER: US 60/192,176
;  PRIOR FILING DATE: 2000-03-27
;  PRIOR APPLICATION NUMBER: US 60/192,179
;  PRIOR FILING DATE: 2000-03-27
;  PRIOR APPLICATION NUMBER: US 60/208,538
;  PRIOR FILING DATE: 2000-06-01
;  PRIOR APPLICATION NUMBER: US 60/244,989
;  PRIOR FILING DATE: 2000-10-30
;  NUMBER OF SEQ ID NOS: 4385
;  SOFTWARE: Friedman macro Napro4
```

```
; SEQ ID NO 3142
;   LENGTH: 17
;   TYPE: DNA
;   ORGANISM: Homo sapiens
US-10-261-185-3142

  Query Match             1.6%;  Score 13.8;  DB 1;  Length 17;
  Best Local Similarity   88.2%;  Pred. No. 2.1e+02;
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        676 AGAAACTGATTTATGAT 692
              ||| ||| |||||||||
Db          1 AGATACTCATTTATGAT 17


RESULT 285
US-10-261-185-3143/c
; Sequence 3143, Application US/10261185
; Publication No. US20040014057A1
; GENERAL INFORMATION:
;  APPLICANT: Kmiec, Eric B.
;  APPLICANT:  Gamper, Howard B.
;  APPLICANT:  Rice, Michael C.
;  TITLE OF INVENTION: Targeted Chromosomal Genomic Alterations with Modified Single
;  TITLE OF INVENTION:  Stranded Oligonucleotides
;  FILE REFERENCE: NaPro-4CON
;  CURRENT APPLICATION NUMBER: US/10/261,185
;  CURRENT FILING DATE:  2002-09-27
;  PRIOR APPLICATION NUMBER: PCT/US01/09761
;  PRIOR FILING DATE: 2001-03-27
;  PRIOR APPLICATION NUMBER: US 60/192,176
;  PRIOR FILING DATE: 2000-03-27
;  PRIOR APPLICATION NUMBER: US 60/192,179
;  PRIOR FILING DATE: 2000-03-27
;  PRIOR APPLICATION NUMBER: US 60/208,538
;  PRIOR FILING DATE: 2000-06-01
;  PRIOR APPLICATION NUMBER: US 60/244,989
;  PRIOR FILING DATE: 2000-10-30
;  NUMBER OF SEQ ID NOS: 4385
;  SOFTWARE: Friedman macro Napro4
; SEQ ID NO 3143
;   LENGTH: 17
;   TYPE: DNA
;   ORGANISM: Homo sapiens
US-10-261-185-3143

  Query Match             1.6%;  Score 13.8;  DB 1;  Length 17;
  Best Local Similarity   88.2%;  Pred. No. 2.1e+02;
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        676 AGAAACTGATTTATGAT 692
              ||| ||| |||||||||
Db         17 AGATACTCATTTATGAT 1


RESULT 286
US-10-138-674-2787/c
; Sequence 2787, Application US/10138674
; Publication No. US20040077565A1
; GENERAL INFORMATION:
;  APPLICANT: Ribozyme Pharmaceuticals, Inc.
;  APPLICANT:  Pavco, Pam
;  APPLICANT:  McSwiggen, Jim
;  APPLICANT:  Stinchcomb, Dan
;  APPLICANT:  Escobedo, Jaime
;  TITLE OF INVENTION: Method and Reagent for the Treatment of Diseases or Conditions Re
;  TITLE OF INVENTION:  Levels of Vascular Endothelial Growth Factor Receptor
;  FILE REFERENCE: MBHB00-876-N (400/049)
;  CURRENT APPLICATION NUMBER: US/10/138,674
;  CURRENT FILING DATE:  2002-05-03
;  NUMBER OF SEQ ID NOS: 20822
;  SOFTWARE: PatentIn version 3.0
; SEQ ID NO 2787
;   LENGTH: 17
;   TYPE: RNA
;   ORGANISM: Mus musculus
US-10-138-674-2787

  Query Match             1.6%;  Score 13.8;  DB 1;  Length 17;
  Best Local Similarity   88.2%;  Pred. No. 2.1e+02;
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        543 TGTAGTCTGAGGCCCCT 559
              || ||||||||| ||||
Db         17 TGCAGTCTGAGGTCCCT 1


RESULT 287
US-10-138-674-5100/c
; Sequence 5100, Application US/10138674
; Publication No. US20040077565A1
; GENERAL INFORMATION:
;  APPLICANT: Ribozyme Pharmaceuticals, Inc.
;  APPLICANT:  Pavco, Pam
;  APPLICANT:  McSwiggen, Jim
;  APPLICANT:  Stinchcomb, Dan
;  APPLICANT:  Escobedo, Jaime
;  TITLE OF INVENTION: Method and Reagent for the Treatment of Diseases or Conditions Rel
;  TITLE OF INVENTION:  Levels of Vascular Endothelial Growth Factor Receptor
;  FILE REFERENCE: MBHB00-876-N (400/049)
;  CURRENT APPLICATION NUMBER: US/10/138,674
;  CURRENT FILING DATE:  2002-05-03
;  NUMBER OF SEQ ID NOS: 20822
;  SOFTWARE: PatentIn version 3.0
; SEQ ID NO 5100
;   LENGTH: 17
;   TYPE: RNA
;   ORGANISM: Homo sapiens
US-10-138-674-5100

  Query Match             1.6%;  Score 13.8;  DB 1;  Length 17;
  Best Local Similarity   88.2%;  Pred. No. 2.1e+02;
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        239 ACCAGTGCAGGTCCTCA 255
              | ||||||| ||||||
Db         17 ATCAGTGCAGCTCCTCA 1


RESULT 288
US-10-138-674-6796
; Sequence 6796, Application US/10138674
; Publication No. US20040077565A1
; GENERAL INFORMATION:
;  APPLICANT: Ribozyme Pharmaceuticals, Inc.
;  APPLICANT:  Pavco, Pam
;  APPLICANT:  McSwiggen, Jim
;  APPLICANT:  Stinchcomb, Dan
;  APPLICANT:  Escobedo, Jaime
;  TITLE OF INVENTION: Method and Reagent for the Treatment of Diseases or Conditions Rel
;  TITLE OF INVENTION:  Levels of Vascular Endothelial Growth Factor Receptor
;  FILE REFERENCE: MBHB00-876-N (400/049)
;  CURRENT APPLICATION NUMBER: US/10/138,674
;  CURRENT FILING DATE:  2002-05-03
;  NUMBER OF SEQ ID NOS: 20822
;  SOFTWARE: PatentIn version 3.0
; SEQ ID NO 6796
;   LENGTH: 17
;   TYPE: RNA
;   ORGANISM: Homo sapiens
US-10-138-674-6796

  Query Match             1.6%;  Score 13.8;  DB 1;  Length 17;
  Best Local Similarity   47.1%;  Pred. No. 2.1e+02;
  Matches    8;  Conservative    7;  Mismatches    2;  Indels    0;  Gaps    0;
```

```
Qy        642 ACTTTTTCAGAGTTGCT 658
              || ::::|||||::| :
Db          1 ACGUUUUCAGAGUUGGU 17


RESULT 289
US-10-138-674-7893/c
; Sequence 7893, Application US/10138674
; Publication No. US20040077565A1
; GENERAL INFORMATION:
;  APPLICANT: Ribozyme Pharmaceuticals, Inc.
;  APPLICANT:  Pavco, Pam
;  APPLICANT:  McSwiggen, Jim
;  APPLICANT:  Stinchcomb, Dan
;  APPLICANT:  Escobedo, Jaime
;  TITLE OF INVENTION: Method and Reagent for the Treatment of Diseases or Conditions Re
;  TITLE OF INVENTION:  Levels of Vascular Endothelial Growth Factor Receptor
;  FILE REFERENCE: MBHB00-876-N (400/049)
;  CURRENT APPLICATION NUMBER: US/10/138,674
;  CURRENT FILING DATE:  2002-05-03
;  NUMBER OF SEQ ID NOS: 20822
;  SOFTWARE: PatentIn version 3.0
; SEQ ID NO 7893
;   LENGTH: 17
;   TYPE: RNA
;   ORGANISM: Homo sapiens
US-10-138-674-7893

  Query Match             1.6%;  Score 13.8;  DB 1;  Length 17;
  Best Local Similarity   88.2%;  Pred. No. 2.1e+02;
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        241 CAGTGCAGGTCCTCACT 257
              ||||||||  |||||| |
Db         17 CAGTGCAGCTCCTCAAT 1


RESULT 290
US-10-287-949A-2787/c
; Sequence 2787, Application US/10287949A
; Publication No. US20040102389A1
; GENERAL INFORMATION:
;  APPLICANT: Ribozyme Pharmaceuticals, Inc.
;  APPLICANT:  Pavco, Pam
;  APPLICANT:  McSwiggen, Jim
;  APPLICANT:  Stinchcomb, Dan
;  APPLICANT:  Escobedo, Jaime
;  TITLE OF INVENTION: Method and Reagent for the Treatment of Diseases or Conditions Re
;  TITLE OF INVENTION:  Levels of Vascular Endothelial Growth Factor Receptor
;  FILE REFERENCE: MBHB00-876-N (400/049)
;  CURRENT APPLICATION NUMBER: US/10/287,949A
;  CURRENT FILING DATE:  2003-04-11
;  NUMBER OF SEQ ID NOS: 20822
;  SOFTWARE: PatentIn version 3.0
; SEQ ID NO 2787
;   LENGTH: 17
;   TYPE: RNA
;   ORGANISM: Mus musculus
US-10-287-949A-2787

  Query Match             1.6%;  Score 13.8;  DB 1;  Length 17;
  Best Local Similarity   88.2%;  Pred. No. 2.1e+02;
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        543 TGTAGTCTGAGGCCCCT 559
              || |||||||| ||||
Db         17 TGCAGTCTGAGGTCCCT 1


RESULT 291
US-10-287-949A-5100/c
; Sequence 5100, Application US/10287949A
; Publication No. US20040102389A1
; GENERAL INFORMATION:
;  APPLICANT: Ribozyme Pharmaceuticals, Inc.
;  APPLICANT:  Pavco, Pam
;  APPLICANT:  McSwiggen, Jim
;  APPLICANT:  Stinchcomb, Dan
;  APPLICANT:  Escobedo, Jaime
;  TITLE OF INVENTION: Method and Reagent for the Treatment of Diseases or Conditions Rel
;  TITLE OF INVENTION:  Levels of Vascular Endothelial Growth Factor Receptor
;  FILE REFERENCE: MBHB00-876-N (400/049)
;  CURRENT APPLICATION NUMBER: US/10/287,949A
;  CURRENT FILING DATE:  2003-04-11
;  NUMBER OF SEQ ID NOS: 20822
;  SOFTWARE: PatentIn version 3.0
; SEQ ID NO 5100
;   LENGTH: 17
;   TYPE: RNA
;   ORGANISM: Homo sapiens
US-10-287-949A-5100

  Query Match             1.6%;  Score 13.8;  DB 1;  Length 17;
  Best Local Similarity   88.2%;  Pred. No. 2.1e+02;
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        239 ACCAGTGCAGGTCCTCA 255
              | |||||||| ||||||
Db         17 ATCAGTGCAGCTCCTCA 1


RESULT 292
US-10-287-949A-6796
; Sequence 6796, Application US/10287949A
; Publication No. US20040102389A1
; GENERAL INFORMATION:
;  APPLICANT: Ribozyme Pharmaceuticals, Inc.
;  APPLICANT:  Pavco, Pam
;  APPLICANT:  McSwiggen, Jim
;  APPLICANT:  Stinchcomb, Dan
;  APPLICANT:  Escobedo, Jaime
;  TITLE OF INVENTION: Method and Reagent for the Treatment of Diseases or Conditions Rel
;  TITLE OF INVENTION:  Levels of Vascular Endothelial Growth Factor Receptor
;  FILE REFERENCE: MBHB00-876-N (400/049)
;  CURRENT APPLICATION NUMBER: US/10/287,949A
;  CURRENT FILING DATE:  2003-04-11
;  NUMBER OF SEQ ID NOS: 20822
;  SOFTWARE: PatentIn version 3.0
; SEQ ID NO 6796
;   LENGTH: 17
;   TYPE: RNA
;   ORGANISM: Homo sapiens
US-10-287-949A-6796

  Query Match             1.6%;  Score 13.8;  DB 1;  Length 17;
  Best Local Similarity   47.1%;  Pred. No. 2.1e+02;
  Matches    8;  Conservative    7;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        642 ACTTTTTCAGAGTTGCT 658
              || ::::|||||::| :
Db          1 ACGUUUUCAGAGUUGGU 17


RESULT 293
US-10-287-949A-7893/c
; Sequence 7893, Application US/10287949A
; Publication No. US20040102389A1
; GENERAL INFORMATION:
;  APPLICANT: Ribozyme Pharmaceuticals, Inc.
;  APPLICANT:  Pavco, Pam
;  APPLICANT:  McSwiggen, Jim
;  APPLICANT:  Stinchcomb, Dan
;  APPLICANT:  Escobedo, Jaime
;  TITLE OF INVENTION: Method and Reagent for the Treatment of Diseases or Conditions Re
;  TITLE OF INVENTION:  Levels of Vascular Endothelial Growth Factor Receptor
;  FILE REFERENCE: MBHB00-876-N (400/049)
```

```
;  CURRENT APPLICATION NUMBER: US/10/287,949A
;  CURRENT FILING DATE:  2003-04-11
;  NUMBER OF SEQ ID NOS: 20822
;  SOFTWARE: PatentIn version 3.0
; SEQ ID NO 7893
;   LENGTH: 17
;   TYPE: RNA
;   ORGANISM: Homo sapiens
US-10-287-949A-7893

  Query Match             1.6%;  Score 13.8;  DB 1;  Length 17;
  Best Local Similarity   88.2%;  Pred. No. 2.1e+02;
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        241 CAGTGCAGGTCCTCACT 257
              ||||||||  ||||||  |
Db         17 CAGTGCAGCTCCTCAAT 1


RESULT 294
US-10-669-841-5350
; Sequence 5350, Application US/10669841
; Publication No. US20040127446A1
; GENERAL INFORMATION:
;  APPLICANT: Sirna Therapeutics, Inc.
;  APPLICANT:  Lawrence, Blatt
;  APPLICANT:  Dennis, Macejak
;  APPLICANT:  James, McSwiggen
;  APPLICANT:  David, Morrissey
;  APPLICANT:  Pamela, Pavco
;  APPLICANT:  Patrice, Lee
;  APPLICANT:  Kenneth, Draper
;  APPLICANT:  Elisabeth, Roberts
;  TITLE OF INVENTION: OLIGONUCLEOTIDE MEDIATED INHIBITION OF HEPATITIS B VIRUS AND HEPA
;  TITLE OF INVENTION:  VIRUS REPLICATION
;  FILE REFERENCE: 400/042US  (MBHB02-249-E)
;  CURRENT APPLICATION NUMBER: US/10/669,841
;  CURRENT FILING DATE:  2003-09-23
;  PRIOR APPLICATION NUMBER: PCT/US02/09187
;  PRIOR FILING DATE: 2002-03-26
;  PRIOR APPLICATION NUMBER: US 60/296,876
;  PRIOR FILING DATE: 2001-06-08
;  PRIOR APPLICATION NUMBER: US 60/335,059
;  PRIOR FILING DATE: 2001-10-24
;  PRIOR APPLICATION NUMBER: US 60/337,055
;  PRIOR FILING DATE: 2001-12-05
;  PRIOR APPLICATION NUMBER: US 60/358,580
;  PRIOR FILING DATE: 2002-02-20
;  PRIOR APPLICATION NUMBER: US 60/363,124
;  PRIOR FILING DATE: 2002-03-11
;  PRIOR APPLICATION NUMBER: US 09/817,879
;  PRIOR FILING DATE: 2001-03-26
;  PRIOR APPLICATION NUMBER: US 09/740,332
;  PRIOR FILING DATE: 2000-12-18
;  PRIOR APPLICATION NUMBER: US 09/611,931
;  PRIOR FILING DATE: 2000-07-07
;  PRIOR APPLICATION NUMBER: US 09/504,321
;  PRIOR FILING DATE: 2000-02-15
;  Remaining Prior Application data removed - See File Wrapper or PALM.
;  NUMBER OF SEQ ID NOS: 16207
;  SOFTWARE: PatentIn version 3.0
; SEQ ID NO 5350
;   LENGTH: 17
;   TYPE: RNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Description of Artificial Sequence:  Nucleic Acid
;   FEATURE:
;   NAME/KEY: misc_feature
;   LOCATION:
;   OTHER INFORMATION: oligonucleotide substrate
US-10-669-841-5350

  Query Match             1.6%;  Score 13.8;  DB 1;  Length 17;
  Best Local Similarity   82.4%;  Pred. No. 2.1e+02;
  Matches   14;  Conservative    1;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        271 CAGAAAACACGGTGGGC 287
              |||||  ||||||:||  |
Db          1 CAGAAGACACGGUGGAC 17


RESULT 295
US-10-723-361-8960
; Sequence 8960, Application US/10723361
; Publication No. US20040137589A1
; GENERAL INFORMATION:
;  APPLICANT: GU, Yizhong
;  APPLICANT:  JI, Yonggang
;  APPLICANT:  PENN, Sharron G.
;  APPLICANT:  HANZEL, David K.
;  APPLICANT:  RANK, David R.
;  APPLICANT:  CHEN, Wensheng
;  APPLICANT:  SHANNON, Mark
;  TITLE OF INVENTION: HUMAN MYOSIN-LIKE POLYPEPTIDE EXPRESSED PREDOMINANTLY IN HEART ANI
;  FILE REFERENCE: PB0105
;  CURRENT APPLICATION NUMBER: US/10/723,361
;  CURRENT FILING DATE:  2003-11-26
;  PRIOR APPLICATION NUMBER: US 09/866,108
;  PRIOR FILING DATE: 2001-05-25
;  PRIOR APPLICATION NUMBER: US 60/207,456
;  PRIOR FILING DATE: 2000-05-26
;  PRIOR APPLICATION NUMBER: GB 24263.6
;  PRIOR FILING DATE: 2000-10-04
;  PRIOR APPLICATION NUMBER: US 60/236,359
;  PRIOR FILING DATE: 2000-09-27
;  PRIOR APPLICATION NUMBER: PCT/US01/00666
;  PRIOR FILING DATE: 2001-01-30
;  PRIOR APPLICATION NUMBER: PCT/US01/00667
;  PRIOR FILING DATE: 2001-01-30
;  PRIOR APPLICATION NUMBER: PCT/US01/00664
;  PRIOR FILING DATE: 2001-01-30
;  PRIOR APPLICATION NUMBER: PCT/US01/00669
;  PRIOR FILING DATE: 2001-01-30
;  PRIOR APPLICATION NUMBER: PCT/US01/00665
;  PRIOR FILING DATE: 2001-01-30
;  PRIOR APPLICATION NUMBER: PCT/US01/00668
;  PRIOR FILING DATE: 2001-01-30
;  Remaining Prior Application data removed - See File Wrapper or PALM.
;  NUMBER OF SEQ ID NOS: 15755
;  SOFTWARE: Aeomica Sequence Listing Engine
; SEQ ID NO 8960
;   LENGTH: 17
;   TYPE: DNA
;   ORGANISM: Homo sapiens
US-10-723-361-8960

  Query Match             1.6%;  Score 13.8;  DB 1;  Length 17;
  Best Local Similarity   88.2%;  Pred. No. 2.1e+02;
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        183 CTGAAGGCCTGCATGGA 199
              |||||||||  ||||||
Db          1 CTGAAGGCCGACATGGA 17


RESULT 296
US-10-681-074-3142
; Sequence 3142, Application US/10681074
; Publication No. US20040175722A1
; GENERAL INFORMATION:
;  APPLICANT: KMIEC, ERIC B.
;  APPLICANT:  VAN BRABANT, ANJA
;  TITLE OF INVENTION: METHODS AND COMPOSITIONS FOR REDUCING SCREENING IN
;  TITLE OF INVENTION:  OLIGONUCLEOTIDE-DIRECTED NUCLEIC ACID SEQUENCE ALTERATION
;  FILE REFERENCE: NaPro-18 US
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;  CURRENT APPLICATION NUMBER: US/10/681,074
;  CURRENT FILING DATE:  2003-10-07
;  PRIOR APPLICATION NUMBER: US 60/453,360
;  PRIOR FILING DATE: 2003-03-07
;  PRIOR APPLICATION NUMBER: US 60/416,983
;  PRIOR FILING DATE: 2002-10-07
;  NUMBER OF SEQ ID NOS: 4375
;  SOFTWARE: PatentIn version 3.2
; SEQ ID NO 3142
;   LENGTH: 17
;   TYPE: DNA
;   ORGANISM: Homo sapiens
US-10-681-074-3142

  Query Match             1.6%;  Score 13.8;  DB 1;  Length 17;
  Best Local Similarity   88.2%;  Pred. No. 2.1e+02;
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        676 AGAAACTGATTTATGAT 692
              ||| ||| |||||||||
Db          1 AGATACTCATTTATGAT 17


RESULT 297
US-10-681-074-3143/c
; Sequence 3143, Application US/10681074
; Publication No. US20040175722A1
; GENERAL INFORMATION:
;  APPLICANT: KMIEC, ERIC B.
;  APPLICANT:  VAN BRABANT, ANJA
;  TITLE OF INVENTION: METHODS AND COMPOSITIONS FOR REDUCING SCREENING IN
;  TITLE OF INVENTION:  OLIGONUCLEOTIDE-DIRECTED NUCLEIC ACID SEQUENCE ALTERATION
;  FILE REFERENCE: NaPro-18 US
;  CURRENT APPLICATION NUMBER: US/10/681,074
;  CURRENT FILING DATE:  2003-10-07
;  PRIOR APPLICATION NUMBER: US 60/453,360
;  PRIOR FILING DATE: 2003-03-07
;  PRIOR APPLICATION NUMBER: US 60/416,983
;  PRIOR FILING DATE: 2002-10-07
;  NUMBER OF SEQ ID NOS: 4375
;  SOFTWARE: PatentIn version 3.2
; SEQ ID NO 3143
;   LENGTH: 17
;   TYPE: DNA
;   ORGANISM: Homo sapiens
US-10-681-074-3143

  Query Match             1.6%;  Score 13.8;  DB 1;  Length 17;
  Best Local Similarity   88.2%;  Pred. No. 2.1e+02;
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        676 AGAAACTGATTTATGAT 692
              ||| ||| |||||||||
Db         17 AGATACTCATTTATGAT 1


RESULT 298
US-10-712-633-1027/c
; Sequence 1027, Application US/10712633
; Publication No. US20040220128A1
; GENERAL INFORMATION:
;  APPLICANT: Ribozyme Pharmaceuticals, Inc.
;  APPLICANT:  Pavco, Pamela
;  APPLICANT:  Sandberg, Jennifer
;  APPLICANT:  Gordon, Gilad
;  APPLICANT:  McSwiggen, James
;  APPLICANT:  Stinchcomb, Dan
;  TITLE OF INVENTION: NUCLEIC ACID BASED MODULATION OF VASCULAR ENDOTHELIAL GROWTH FACT
;  TITLE OF INVENTION:  RECEPTOR FOR THE TREATMENT OF ANGIOGENESIS RELATED DISEASES AND
;  FILE REFERENCE: MBHB02-325PCT (400/047)
;  CURRENT APPLICATION NUMBER: US/10/712,633
;  CURRENT FILING DATE:  2003-11-13
;  PRIOR APPLICATION NUMBER: US 60/005,974
;  PRIOR FILING DATE: 1995-10-26
;  PRIOR APPLICATION NUMBER: US 08/584,040
;  PRIOR FILING DATE: 1996-01-08
;  PRIOR APPLICATION NUMBER: US 09/371,772
;  PRIOR FILING DATE: 1999-08-10
;  PRIOR APPLICATION NUMBER: US 09/708,690
;  PRIOR FILING DATE: 2000-11-07
;  PRIOR APPLICATION NUMBER: US 09/870,161
;  PRIOR FILING DATE: 2001-05-29
;  PRIOR APPLICATION NUMBER: US 60/334,461
;  PRIOR FILING DATE: 2001-11-30
;  PRIOR APPLICATION NUMBER: US 10/138,674
;  PRIOR FILING DATE: 2002-05-03
;  NUMBER OF SEQ ID NOS: 5989
;  SOFTWARE: PatentIn version 3.0
; SEQ ID NO 1027
;   LENGTH: 17
;   TYPE: RNA
;   ORGANISM: Homo Sapiens
US-10-712-633-1027

  Query Match             1.6%;  Score 13.8;  DB 1;  Length 17;
  Best Local Similarity   88.2%;  Pred. No. 2.1e+02;
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        241 CAGTGCAGGTCCTCACT 257
              |||||||| |||||| |
Db         17 CAGTGCAGCTCCTCAAT 1


RESULT 299
US-10-498-462-563/c
; Sequence 563, Application US/10498462
; Publication No. US20040259175A1
; GENERAL INFORMATION:
;  APPLICANT: Guo, Jinjiao
;  TITLE OF INVENTION: HUMAN PROSTATE CANCER CANDIDATE PROTEIN 1
;  FILE REFERENCE: PB01102
;  CURRENT APPLICATION NUMBER: US/10/498,462
;  CURRENT FILING DATE:  2004-06-10
;  PRIOR APPLICATION NUMBER: US 60/339,764
;  PRIOR FILING DATE: 2001-12-10
;  PRIOR APPLICATION NUMBER: PCT/US02/37506
;  PRIOR FILING DATE: 2002-11-22
;  NUMBER OF SEQ ID NOS: 3320
;  SOFTWARE: Aeomica Sequence Listing Engine
; SEQ ID NO 563
;   LENGTH: 17
;   TYPE: DNA
;   ORGANISM: Homo sapiens
US-10-498-462-563

  Query Match             1.6%;  Score 13.8;  DB 1;  Length 17;
  Best Local Similarity   88.2%;  Pred. No. 2.1e+02;
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        635 TTGTGTGACTTTTTCAG 651
              || || ||||||||||
Db         17 TTCTGAGACTTTTTCAG 1


RESULT 300
US-10-641-960-157
; Sequence 157, Application US/10641960
; Publication No. US20050037366A1
; GENERAL INFORMATION:
;  APPLICANT: Gut, Joseph
;  TITLE OF INVENTION: INDIVIDUAL DRUG SAFETY
;  FILE REFERENCE: DT-6622
;  CURRENT APPLICATION NUMBER: US/10/641,960
;  CURRENT FILING DATE:  2003-08-14
;  NUMBER OF SEQ ID NOS: 158
;  SOFTWARE: PatentIn Ver. 2.1
```

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; SEQ ID NO 157
;   LENGTH: 15
;   TYPE: DNA
;   ORGANISM: Homo sapiens
US-10-641-960-157

  Query Match             1.5%;  Score 13.4;  DB 1;  Length 15;
  Best Local Similarity   93.3%;  Pred. No. 2.1e+02;
  Matches   14;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy         83 TGCGTGCTGAAGGGC 97
              ||||||| |||||||
Db          1 TGCGTGCAGAAGGGC 15


RESULT 301
US-10-608-062-2
; Sequence 2, Application US/10608062
; Publication No. US20040014122A1
; GENERAL INFORMATION:
;  APPLICANT: BREEN, ALEXANDER
;  APPLICANT:  SINGLETON, FREDDIE
;  TITLE OF INVENTION: DETECTION OF SPORE FORMING BACTERIA
;  FILE REFERENCE: B1113P
;  CURRENT APPLICATION NUMBER: US/10/608,062
;  CURRENT FILING DATE:  2003-06-27
;  PRIOR APPLICATION NUMBER: US 09/356,677
;  PRIOR FILING DATE: 1999-07-20
;  PRIOR APPLICATION NUMBER: US 09/085,359
;  PRIOR FILING DATE: 1998-05-27
;  NUMBER OF SEQ ID NOS: 52
;  SOFTWARE: PatentIn version 3.1
; SEQ ID NO 2
;   LENGTH: 16
;   TYPE: DNA
;   ORGANISM: Bacillus cereus
US-10-608-062-2

  Query Match             1.5%;  Score 13.4;  DB 1;  Length 16;
  Best Local Similarity   93.3%;  Pred. No. 2.1e+02;
  Matches   14;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        429 AAAAAGCAGATGACT 443
              ||||||||| |||||
Db          2 AAAAAGCAGTTGACT 16


RESULT 302
US-10-138-674-5942/c
; Sequence 5942, Application US/10138674
; Publication No. US20040077565A1
; GENERAL INFORMATION:
;  APPLICANT: Ribozyme Pharmaceuticals, Inc.
;  APPLICANT:  Pavco, Pam
;  APPLICANT:  McSwiggen, Jim
;  APPLICANT:  Stinchcomb, Dan
;  APPLICANT:  Escobedo, Jaime
;  TITLE OF INVENTION: Method and Reagent for the Treatment of Diseases or Conditions Re
;  TITLE OF INVENTION:  Levels of Vascular Endothelial Growth Factor Receptor.
;  FILE REFERENCE: MBHB00-876-N (400/049)
;  CURRENT APPLICATION NUMBER: US/10/138,674
;  CURRENT FILING DATE:  2002-05-03
;  NUMBER OF SEQ ID NOS: 20822
;  SOFTWARE: PatentIn version 3.0
; SEQ ID NO 5942
;   LENGTH: 16
;   TYPE: RNA
;   ORGANISM: Homo sapiens
US-10-138-674-5942

  Query Match             1.5%;  Score 13.4;  DB 1;  Length 16;
  Best Local Similarity   93.3%;  Pred. No. 2.1e+02;
  Matches   14;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        241 CAGTGCAGGTCCTCA 255
              ||||||| |||||||
Db         16 CAGTGCAGCTCCTCA 2


RESULT 303
US-10-287-949A-5942/c
; Sequence 5942, Application US/10287949A
; Publication No. US20040102389A1
; GENERAL INFORMATION:
;  APPLICANT: Ribozyme Pharmaceuticals, Inc.
;  APPLICANT:  Pavco, Pam
;  APPLICANT:  McSwiggen, Jim
;  APPLICANT:  Stinchcomb, Dan
;  APPLICANT:  Escobedo, Jaime
;  TITLE OF INVENTION: Method and Reagent for the Treatment of Diseases or Conditions Rel
;  TITLE OF INVENTION:  Levels of Vascular Endothelial Growth Factor Receptor
;  FILE REFERENCE: MBHB00-876-N (400/049)
;  CURRENT APPLICATION NUMBER: US/10/287,949A
;  CURRENT FILING DATE:  2003-04-11
;  NUMBER OF SEQ ID NOS: 20822
;  SOFTWARE: PatentIn version 3.0
; SEQ ID NO 5942
;   LENGTH: 16
;   TYPE: RNA
;   ORGANISM: Homo sapiens
US-10-287-949A-5942

  Query Match             1.5%;  Score 13.4;  DB 1;  Length 16;
  Best Local Similarity   93.3%;  Pred. No. 2.1e+02;
  Matches   14;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        241 CAGTGCAGGTCCTCA 255
              ||||||| |||||||
Db         16 CAGTGCAGCTCCTCA 2


RESULT 304
US-10-257-017B-154649/c
; Sequence 154649, Application US/10257017B
; Publication No. US20040241651A1
; GENERAL INFORMATION:
;  APPLICANT: Alexander Olek
;  APPLICANT:  Christian Piepenbrock
;  APPLICANT:  Kurt Berlin
;  TITLE OF INVENTION: Detection of single nucleotide polymorhphisms [SNPs] and cytosine
;  TITLE OF INVENTION:  methylations
;  FILE REFERENCE: E01/1193/WO
;  CURRENT APPLICATION NUMBER: US/10/257,017B
;  CURRENT FILING DATE:  2002-10-07
;  PRIOR APPLICATION NUMBER: DE 10019173.8
;  PRIOR FILING DATE: 2000-04-07
;  NUMBER OF SEQ ID NOS: 382046
; SEQ ID NO 154649
;   LENGTH: 13
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Oligonucleotide for detection of SNP TSC0039096
US-10-257-017B-154649

  Query Match             1.5%;  Score 13;  DB 1;  Length 13;
  Best Local Similarity   100.0%;  Pred. No. 2e+02;
  Matches   13;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        527 TAAACATTCCCTT 539
              |||||||||||||
Db         13 TAAACATTCCCTT 1


RESULT 305
US-10-257-017B-154650
```

```
; Sequence 154650, Application US/10257017B
; Publication No. US20040241651A1
; GENERAL INFORMATION:
;  APPLICANT: Alexander Olek
;  APPLICANT:  Christian Piepenbrock
;  APPLICANT:  Kurt Berlin
;  TITLE OF INVENTION: Detection of single nucleotide polymorhphisms [SNPs] and cytosine
;  TITLE OF INVENTION:  methylations
;  FILE REFERENCE: E01/1193/WO
;  CURRENT APPLICATION NUMBER: US/10/257,017B
;  CURRENT FILING DATE:  2002-10-07
;  PRIOR APPLICATION NUMBER: DE 10019173.8
;  PRIOR FILING DATE: 2000-04-07
;  NUMBER OF SEQ ID NOS: 382046
; SEQ ID NO 154650
;   LENGTH: 13
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Oligonucleotide for detection of SNP TSC0039096
US-10-257-017B-154650

  Query Match             1.5%;  Score 13;  DB 1;  Length 13;
  Best Local Similarity   100.0%;  Pred. No. 2e+02;
  Matches   13;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        527 TAAACATTCCCTT 539
              |||||||||||||
Db          1 TAAACATTCCCTT 13


RESULT 306
US-10-257-017B-156539
; Sequence 156539, Application US/10257017B
; Publication No. US20040241651A1
; GENERAL INFORMATION:
;  APPLICANT: Alexander Olek
;  APPLICANT:  Christian Piepenbrock
;  APPLICANT:  Kurt Berlin
;  TITLE OF INVENTION: Detection of single nucleotide polymorhphisms [SNPs] and cytosine
;  TITLE OF INVENTION:  methylations
;  FILE REFERENCE: E01/1193/WO
;  CURRENT APPLICATION NUMBER: US/10/257,017B
;  CURRENT FILING DATE:  2002-10-07
;  PRIOR APPLICATION NUMBER: DE 10019173.8
;  PRIOR FILING DATE: 2000-04-07
;  NUMBER OF SEQ ID NOS: 382046
; SEQ ID NO 156539
;   LENGTH: 13
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Oligonucleotide for detection of SNP TSC0039466
US-10-257-017B-156539

  Query Match             1.5%;  Score 13;  DB 1;  Length 13;
  Best Local Similarity   100.0%;  Pred. No. 2e+02;
  Matches   13;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        706 TGTATAGTTTTAT 718
              |||||||||||||
Db          1 TGTATAGTTTTAT 13


RESULT 307
US-10-257-017B-156540/c
; Sequence 156540, Application US/10257017B
; Publication No. US20040241651A1
; GENERAL INFORMATION:
;  APPLICANT: Alexander Olek
;  APPLICANT:  Christian Piepenbrock
;  APPLICANT:  Kurt Berlin
;  TITLE OF INVENTION: Detection of single nucleotide polymorhphisms [SNPs] and cytosine
;  TITLE OF INVENTION:  methylations
;  FILE REFERENCE: E01/1193/WO
;  CURRENT APPLICATION NUMBER: US/10/257,017B
;  CURRENT FILING DATE:  2002-10-07
;  PRIOR APPLICATION NUMBER: DE 10019173.8
;  PRIOR FILING DATE: 2000-04-07
;  NUMBER OF SEQ ID NOS: 382046
; SEQ ID NO 156540
;   LENGTH: 13
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Oligonucleotide for detection of SNP TSC0039466
US-10-257-017B-156540

  Query Match             1.5%;  Score 13;  DB 1;  Length 13;
  Best Local Similarity   100.0%;  Pred. No. 2e+02;
  Matches   13;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        706 TGTATAGTTTTAT 718
              |||||||||||||
Db         13 TGTATAGTTTTAT 1


RESULT 308
US-10-257-017B-201017
; Sequence 201017, Application US/10257017B
; Publication No. US20040241651A1
; GENERAL INFORMATION:
;  APPLICANT: Alexander Olek
;  APPLICANT:  Christian Piepenbrock
;  APPLICANT:  Kurt Berlin
;  TITLE OF INVENTION: Detection of single nucleotide polymorhphisms [SNPs] and cytosine
;  TITLE OF INVENTION:  methylations
;  FILE REFERENCE: E01/1193/WO
;  CURRENT APPLICATION NUMBER: US/10/257,017B
;  CURRENT FILING DATE:  2002-10-07
;  PRIOR APPLICATION NUMBER: DE 10019173.8
;  PRIOR FILING DATE: 2000-04-07
;  NUMBER OF SEQ ID NOS: 382046
; SEQ ID NO 201017
;   LENGTH: 13
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Oligonucleotide for detection of SNP TSC0049445
US-10-257-017B-201017

  Query Match             1.5%;  Score 13;  DB 1;  Length 13;
  Best Local Similarity   100.0%;  Pred. No. 2e+02;
  Matches   13;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        215 TTTGGAGATAATA 227
              |||||||||||||
Db          1 TTTGGAGATAATA 13


RESULT 309
US-10-257-017B-201018/c
; Sequence 201018, Application US/10257017B
; Publication No. US20040241651A1
; GENERAL INFORMATION:
;  APPLICANT: Alexander Olek
;  APPLICANT:  Christian Piepenbrock
;  APPLICANT:  Kurt Berlin
;  TITLE OF INVENTION: Detection of single nucleotide polymorhphisms [SNPs] and cytosine
;  TITLE OF INVENTION:  methylations
;  FILE REFERENCE: E01/1193/WO
;  CURRENT APPLICATION NUMBER: US/10/257,017B
;  CURRENT FILING DATE:  2002-10-07
;  PRIOR APPLICATION NUMBER: DE 10019173.8
;  PRIOR FILING DATE: 2000-04-07
;  NUMBER OF SEQ ID NOS: 382046
```

; SEQ ID NO 201018
; LENGTH: 13
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Oligonucleotide for detection of SNP TSC0049445
US-10-257-017B-201018

Query Match 1.5%; Score 13; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 2e+02;
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 215 TTTGGAGATAATA 227
||||||||||||||
Db 13 TTTGGAGATAATA 1

RESULT 310
US-10-440-464-42/c
; Sequence 42, Application US/10440464
; Publication No. US20040018528A1
; GENERAL INFORMATION:
; APPLICANT: DEPRIMO, SAMUEL
; APPLICANT: O'FARRELL, ANNE-MARIE
; APPLICANT: MORIMOTO, ALYSSA
; APPLICANT: SMOLICH, BEVERLY
; APPLICANT: MANNING, WILLIAM
; APPLICANT: WALTER, SARAH
; APPLICANT: CHERRINGTON, JULIE
; APPLICANT: SCHILLING, JIM
; TITLE OF INVENTION: NOVEL BIOMARKERS OF TYROSINE KINASE INHIBITOR EXPOSURE
; TITLE OF INVENTION: AND ACTIVITY IN MAMMALS
; FILE REFERENCE: 038602/1592
; CURRENT APPLICATION NUMBER: US/10/440,464
; CURRENT FILING DATE: 2003-05-19
; PRIOR APPLICATION NUMBER: 60/380,872
; PRIOR FILING DATE: 2002-05-17
; PRIOR APPLICATION NUMBER: 60/448,922
; PRIOR FILING DATE: 2003-02-24
; PRIOR APPLICATION NUMBER: 60/448,874
; PRIOR FILING DATE: 2003-02-24
; NUMBER OF SEQ ID NOS: 185
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 42
; LENGTH: 15
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: Probe
US-10-440-464-42

Query Match 1.5%; Score 13; DB 1; Length 15;
Best Local Similarity 100.0%; Pred. No. 2.2e+02;
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 441 ACTTGGGCAAAGG 453
||||||||||||||
Db 13 ACTTGGGCAAAGG 1

RESULT 311
US-10-138-674-7004
; Sequence 7004, Application US/10138674
; Publication No. US20040077565A1
; GENERAL INFORMATION:
; APPLICANT: Ribozyme Pharmaceuticals, Inc.
; APPLICANT: Pavco, Pam
; APPLICANT: McSwiggen, Jim
; APPLICANT: Stinchcomb, Dan
; APPLICANT: Escobedo, Jaime
; TITLE OF INVENTION: Method and Reagent for the Treatment of Diseases or Conditions Re
; TITLE OF INVENTION: Levels of Vascular Endothelial Growth Factor Receptor
; FILE REFERENCE: MBHB00-876-N (400/049)
; CURRENT APPLICATION NUMBER: US/10/138,674
; CURRENT FILING DATE: 2002-05-03
; NUMBER OF SEQ ID NOS: 20822
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 7004
; LENGTH: 16
; TYPE: RNA
; ORGANISM: Homo sapiens
US-10-138-674-7004

Query Match 1.5%; Score 13; DB 1; Length 16;
Best Local Similarity 84.6%; Pred. No. 2.3e+02;
Matches 11; Conservative 2; Mismatches 0; Indels 0; Gaps 0;

Qy 421 GGTCCATGAAAAA 433
||:|||:||||||
Db 4 GGUCCAUGAAAAA 16

RESULT 312
US-10-287-949A-7004
; Sequence 7004, Application US/10287949A
; Publication No. US20040102389A1
; GENERAL INFORMATION:
; APPLICANT: Ribozyme Pharmaceuticals, Inc.
; APPLICANT: Pavco, Pam
; APPLICANT: McSwiggen, Jim
; APPLICANT: Stinchcomb, Dan
; APPLICANT: Escobedo, Jaime
; TITLE OF INVENTION: Method and Reagent for the Treatment of Diseases or Conditions Rel
; TITLE OF INVENTION: Levels of Vascular Endothelial Growth Factor Receptor
; FILE REFERENCE: MBHB00-876-N (400/049)
; CURRENT APPLICATION NUMBER: US/10/287,949A
; CURRENT FILING DATE: 2003-04-11
; NUMBER OF SEQ ID NOS: 20822
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 7004
; LENGTH: 16
; TYPE: RNA
; ORGANISM: Homo sapiens
US-10-287-949A-7004

Query Match 1.5%; Score 13; DB 1; Length 16;
Best Local Similarity 84.6%; Pred. No. 2.3e+02;
Matches 11; Conservative 2; Mismatches 0; Indels 0; Gaps 0;

Qy 421 GGTCCATGAAAAA 433
||:|||:||||||
Db 4 GGUCCAUGAAAAA 16

RESULT 313
US-10-339-674-904/c
; Sequence 904, Application US/10339674
; Publication No. US20030204318A1
; GENERAL INFORMATION:
; APPLICANT: Feldmann, Richard J.; Global Determinants, Inc.
; TITLE OF INVENTION: Escherichia coli K-12 MG1655 complete genome.
; FILE REFERENCE: Jim Zegeer Law Offices - 703-684-8333
; CURRENT APPLICATION NUMBER: US/10/339,674
; CURRENT FILING DATE: 2003-06-06
; NUMBER OF SEQ ID NOS: 3537
; SOFTWARE: Proprietary
; SEQ ID NO 904
; LENGTH: 16
; TYPE: DNA
; ORGANISM: Escherichia coli K-12 MG1655 complete genome.
; FEATURE:
; LOCATION: (899026)...(899041)
; OTHER INFORMATION: Chromosome = 1 Strand = positive ConnectronObjectNumber = 1176
US-10-339-674-904

Query Match 1.5%; Score 12.8; DB 1; Length 16;

```
  Best Local Similarity   87.5%;  Pred. No. 2.4e+02;
  Matches   14;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        325 TGTGACTGCTGACAAA 340
              || ||||| |||||||
Db         16 TGAGACTGATGACAAA 1


RESULT 314
US-10-339-674-905
; Sequence 905, Application US/10339674
; Publication No. US20030204318A1
; GENERAL INFORMATION:
;  APPLICANT: Feldmann, Richard J.; Global Determinants, Inc.
;  TITLE OF INVENTION: Escherichia coli K-12 MG1655 complete genome.
;  FILE REFERENCE: Jim Zegeer Law Offices - 703-684-8333
;  CURRENT APPLICATION NUMBER: US/10/339,674
;  CURRENT FILING DATE:  2003-06-06
;  NUMBER OF SEQ ID NOS: 3537
;  SOFTWARE: Proprietary
; SEQ ID NO 905
;   LENGTH: 16
;   TYPE: DNA
;   ORGANISM: Escherichia coli K-12 MG1655 complete genome.
;   FEATURE:
;   LOCATION: (899026)...(899041)
;   OTHER INFORMATION: Chromosome = 1  Strand = negative  ConnectronObjectNumber =  1175
US-10-339-674-905

  Query Match             1.5%;  Score 12.8;  DB 1;  Length 16;
  Best Local Similarity   87.5%;  Pred. No. 2.4e+02;
  Matches   14;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        325 TGTGACTGCTGACAAA 340
              || ||||| |||||||
Db          1 TGAGACTGATGACAAA 16


RESULT 315
US-10-339-674-906
; Sequence 906, Application US/10339674
; Publication No. US20030204318A1
; GENERAL INFORMATION:
;  APPLICANT: Feldmann, Richard J.; Global Determinants, Inc.
;  TITLE OF INVENTION: Escherichia coli K-12 MG1655 complete genome.
;  FILE REFERENCE: Jim Zegeer Law Offices - 703-684-8333
;  CURRENT APPLICATION NUMBER: US/10/339,674
;  CURRENT FILING DATE:  2003-06-06
;  NUMBER OF SEQ ID NOS: 3537
;  SOFTWARE: Proprietary
; SEQ ID NO 906
;   LENGTH: 16
;   TYPE: DNA
;   ORGANISM: Escherichia coli K-12 MG1655 complete genome.
;   FEATURE:
;   LOCATION: (899026)...(899041)
;   OTHER INFORMATION: Chromosome = 1  Strand = negative  ConnectronObjectNumber =  1174
US-10-339-674-906

  Query Match             1.5%;  Score 12.8;  DB 1;  Length 16;
  Best Local Similarity   87.5%;  Pred. No. 2.4e+02;
  Matches   14;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        325 TGTGACTGCTGACAAA 340
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Db          1 TGAGACTGATGACAAA 16


RESULT 316
US-10-138-674-5969/c
; Sequence 5969, Application US/10138674
; Publication No. US20040077565A1
; GENERAL INFORMATION:
;  APPLICANT: Ribozyme Pharmaceuticals, Inc.
;  APPLICANT:  Pavco, Pam
;  APPLICANT:  McSwiggen, Jim
;  APPLICANT:  Stinchcomb, Dan
;  APPLICANT:  Escobedo, Jaime
;  TITLE OF INVENTION: Method and Reagent for the Treatment of Diseases or Conditions Rel
;  TITLE OF INVENTION:  Levels of Vascular Endothelial Growth Factor Receptor
;  FILE REFERENCE: MBHB00-876-N (400/049)
;  CURRENT APPLICATION NUMBER: US/10/138,674
;  CURRENT FILING DATE:  2002-05-03
;  NUMBER OF SEQ ID NOS: 20822
;  SOFTWARE: PatentIn version 3.0
; SEQ ID NO 5969
;   LENGTH: 16
;   TYPE: RNA
;   ORGANISM: Homo sapiens
US-10-138-674-5969

  Query Match             1.5%;  Score 12.8;  DB 1;  Length 16;
  Best Local Similarity   87.5%;  Pred. No. 2.4e+02;
  Matches   14;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        638 TGTGACTTTTTCAGAG 653
              |||||| ||||||| |
Db         16 TGTGACATTTTCAGTG 1


RESULT 317
US-10-138-674-6103
; Sequence 6103, Application US/10138674
; Publication No. US20040077565A1
; GENERAL INFORMATION:
;  APPLICANT: Ribozyme Pharmaceuticals, Inc.
;  APPLICANT:  Pavco, Pam
;  APPLICANT:  McSwiggen, Jim
;  APPLICANT:  Stinchcomb, Dan
;  APPLICANT:  Escobedo, Jaime
;  TITLE OF INVENTION: Method and Reagent for the Treatment of Diseases or Conditions Rel
;  TITLE OF INVENTION:  Levels of Vascular Endothelial Growth Factor Receptor
;  FILE REFERENCE: MBHB00-876-N (400/049)
;  CURRENT APPLICATION NUMBER: US/10/138,674
;  CURRENT FILING DATE:  2002-05-03
;  NUMBER OF SEQ ID NOS: 20822
;  SOFTWARE: PatentIn version 3.0
; SEQ ID NO 6103
;   LENGTH: 16
;   TYPE: RNA
;   ORGANISM: Homo sapiens
US-10-138-674-6103

  Query Match             1.5%;  Score 12.8;  DB 1;  Length 16;
  Best Local Similarity   75.0%;  Pred. No. 2.4e+02;
  Matches   12;  Conservative    2;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        424 CCATGAAAAAGCAGAT 439
              |||:||||| ||| |:
Db          1 CCAUGAAAAUGCAAAU 16


RESULT 318
US-10-287-949A-5969/c
; Sequence 5969, Application US/10287949A
; Publication No. US20040102389A1
; GENERAL INFORMATION:
;  APPLICANT: Ribozyme Pharmaceuticals, Inc.
;  APPLICANT:  Pavco, Pam
;  APPLICANT:  McSwiggen, Jim
;  APPLICANT:  Stinchcomb, Dan
;  APPLICANT:  Escobedo, Jaime
;  TITLE OF INVENTION: Method and Reagent for the Treatment of Diseases or Conditions Re
;  TITLE OF INVENTION:  Levels of Vascular Endothelial Growth Factor Receptor
;  FILE REFERENCE: MBHB00-876-N (400/049)
;  CURRENT APPLICATION NUMBER: US/10/287,949A
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;  CURRENT FILING DATE:  2003-04-11
;  NUMBER OF SEQ ID NOS: 20822
;  SOFTWARE: PatentIn version 3.0
; SEQ ID NO 5969
;   LENGTH: 16
;   TYPE: RNA
;   ORGANISM: Homo sapiens
US-10-287-949A-5969

  Query Match             1.5%;  Score 12.8;  DB 1;  Length 16;
  Best Local Similarity   87.5%;  Pred. No. 2.4e+02;
  Matches   14;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        638 TGTGACTTTTTCAGAG 653
              |||||| ||||||| |
Db         16 TGTGACATTTTCAGTG 1


RESULT 319
US-10-287-949A-6103
; Sequence 6103, Application US/10287949A
; Publication No. US20040102389A1
; GENERAL INFORMATION:
;  APPLICANT: Ribozyme Pharmaceuticals, Inc.
;  APPLICANT:  Pavco, Pam
;  APPLICANT:  McSwiggen, Jim
;  APPLICANT:  Stinchcomb, Dan
;  APPLICANT:  Escobedo, Jaime
;  TITLE OF INVENTION: Method and Reagent for the Treatment of Diseases or Conditions Re
;  TITLE OF INVENTION:  Levels of Vascular Endothelial Growth Factor Receptor
;  FILE REFERENCE: MBHB00-876-N (400/049)
;  CURRENT APPLICATION NUMBER: US/10/287,949A
;  CURRENT FILING DATE:  2003-04-11
;  NUMBER OF SEQ ID NOS: 20822
;  SOFTWARE: PatentIn version 3.0
; SEQ ID NO 6103
;   LENGTH: 16
;   TYPE: RNA
;   ORGANISM: Homo sapiens
US-10-287-949A-6103

  Query Match             1.5%;  Score 12.8;  DB 1;  Length 16;
  Best Local Similarity   75.0%;  Pred. No. 2.4e+02;
  Matches   12;  Conservative    2;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        424 CCATGAAAAAGCAGAT 439
              |||:||||| ||| |:
Db          1 CCAUGAAAAUGCAAAU 16


RESULT 320
US-10-257-017B-227623/c
; Sequence 227623, Application US/10257017B
; Publication No. US20040241651A1
; GENERAL INFORMATION:
;  APPLICANT: Alexander Olek
;  APPLICANT:  Christian Piepenbrock
;  APPLICANT:  Kurt Berlin
;  TITLE OF INVENTION: Detection of single nucleotide polymorhphisms [SNPs] and cytosine
;  TITLE OF INVENTION:  methylations
;  FILE REFERENCE: E01/1193/WO
;  CURRENT APPLICATION NUMBER: US/10/257,017B
;  CURRENT FILING DATE:  2002-10-07
;  PRIOR APPLICATION NUMBER: DE 10019173.8
;  PRIOR FILING DATE: 2000-04-07
;  NUMBER OF SEQ ID NOS: 382046
; SEQ ID NO 227623
;   LENGTH: 13
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Oligonucleotide for detection of SNP TSC0055504
US-10-257-017B-227623

  Query Match             1.4%;  Score 12.6;  DB 1;  Length 13;
  Best Local Similarity   92.3%;  Pred. No. 2.2e+02;
  Matches   12;  Conservative    1;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        600 GATAAACATTAAA 612
              :|||||||||||
Db         13 RATAAACATTAAA 1


RESULT 321
US-10-257-017B-227624
; Sequence 227624, Application US/10257017B
; Publication No. US20040241651A1
; GENERAL INFORMATION:
;  APPLICANT: Alexander Olek
;  APPLICANT:  Christian Piepenbrock
;  APPLICANT:  Kurt Berlin
;  TITLE OF INVENTION: Detection of single nucleotide polymorhphisms [SNPs] and cytosine
;  TITLE OF INVENTION:  methylations
;  FILE REFERENCE: E01/1193/WO
;  CURRENT APPLICATION NUMBER: US/10/257,017B
;  CURRENT FILING DATE:  2002-10-07
;  PRIOR APPLICATION NUMBER: DE 10019173.8
;  PRIOR FILING DATE: 2000-04-07
;  NUMBER OF SEQ ID NOS: 382046
; SEQ ID NO 227624
;   LENGTH: 13
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Oligonucleotide for detection of SNP TSC0055504
US-10-257-017B-227624

  Query Match             1.4%;  Score 12.6;  DB 1;  Length 13;
  Best Local Similarity   92.3%;  Pred. No. 2.2e+02;
  Matches   12;  Conservative    1;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        600 GATAAACATTAAA 612
              :|||||||||||
Db          1 RATAAACATTAAA 13


Search completed: April 14, 2005, 16:49:42
Job time : 3 secs
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GenCore version 5.1.6

OM nucleic - nucleic search, using sw model

Run on: April 14, 2005, 16:42:54 ; Search time 1 Seconds
(without alignments)
4.263 Million cell updates/sec

Title: US-10-672-866-3
Perfect score: 874
Sequence: 1 ctgcagcgtctggggtttcc.....tattaaaagaatccaaattc 874

Scoring table: IDENTITY_NUC
Gapop 10.0 , Gapext 0.5

Searched: 135 seqs, 2439 residues

Total number of hits satisfying chosen parameters: 270

Minimum DB seq length: 8
Maximum DB seq length: 50

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 135 summaries

Database : rge3.seq:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

	Result No.	Score	% Query Match	Length	DB	ID	Description
	1	28	3.2	28	1	AR090891	ACCESSION:AR090891
c	2	28	3.2	28	1	AR090892	ACCESSION:AR090892
	3	28	3.2	28	1	AR197926	ACCESSION:AR197926
c	4	28	3.2	28	1	AR197927	ACCESSION:AR197927
	5	28	3.2	28	1	AR260080	ACCESSION:AR260080
c	6	28	3.2	28	1	AR260081	ACCESSION:AR260081
	7	27.4	3.1	29	1	E06744	ACCESSION:E06744
c	8	27	3.1	27	1	AX473368	ACCESSION:AX473368
c	9	24	2.7	24	1	AR061116	ACCESSION:AR061116
c	10	24	2.7	24	1	AR064690	ACCESSION:AR064690
c	11	24	2.7	24	1	AR528355	ACCESSION:AR528355
	12	23	2.6	23	1	AX473370	ACCESSION:AX473370
c	13	23	2.6	23	1	AX473371	ACCESSION:AX473371
	14	23	2.6	23	1	AX710079	ACCESSION:AX710079
c	15	23	2.6	23	1	AX710080	ACCESSION:AX710080
c	16	21.8	2.5	25	1	A06400	ACCESSION:A06400
c	17	21.8	2.5	25	1	AR364465	ACCESSION:AR364465
c	18	21	2.4	21	1	BD144206	ACCESSION:BD144206
c	19	20.4	2.3	22	1	BD144209	ACCESSION:BD144209
c	20	20	2.3	21	1	AR061103	ACCESSION:AR061103
c	21	20	2.3	21	1	AR064682	ACCESSION:AR064682
	22	20	2.3	21	1	I04213	ACCESSION:I04213
	23	20	2.3	21	1	I06878	ACCESSION:I06878
c	24	20	2.3	21	1	AR528347	ACCESSION:AR528347
	25	19.8	2.3	23	1	BD174099	ACCESSION:BD174099
c	26	19	2.2	19	1	BD144208	ACCESSION:BD144208
	27	17	1.9	17	1	AX671956	ACCESSION:AX671956
	28	17	1.9	17	1	AX673655	ACCESSION:AX673655
c	29	17	1.9	17	1	AX730213	ACCESSION:AX730213
	30	17	1.9	17	1	AX733568	ACCESSION:AX733568
	31	17	1.9	17	1	AX736487	ACCESSION:AX736487
	32	17	1.9	17	1	AX739220	ACCESSION:AX739220
	33	17	1.9	19	1	BD174097	ACCESSION:BD174097
c	34	17	1.9	21	1	AR061105	ACCESSION:AR061105
c	35	17	1.9	21	1	AR064684	ACCESSION:AR064684
c	36	17	1.9	21	1	AR528349	ACCESSION:AR528349
c	37	16.8	1.9	20	1	AR338227	ACCESSION:AR338227
	38	16.8	1.9	21	1	AR061108	ACCESSION:AR061108
	39	16.8	1.9	21	1	AR064687	ACCESSION:AR064687
	40	16.8	1.9	21	1	AR528352	ACCESSION:AR528352
c	41	16	1.8	16	1	I04212	ACCESSION:I04212
c	42	16	1.8	16	1	I06877	ACCESSION:I06877
c	43	16	1.8	17	1	AX081870	ACCESSION:AX081870
	44	16	1.8	17	1	AX737712	ACCESSION:AX737712
	45	16	1.8	17	1	AX737721	ACCESSION:AX737721
c	46	16	1.8	18	1	AX378471	ACCESSION:AX378471
	47	16	1.8	19	1	AR225282	ACCESSION:AR225282
	48	15.6	1.8	17	1	AX706659	ACCESSION:AX706659
	49	15.6	1.8	17	1	AX707589	ACCESSION:AX707589
c	50	15.4	1.8	17	1	BD255580	ACCESSION:BD255580
c	51	15.4	1.8	17	1	BD255581	ACCESSION:BD255581
c	52	15.4	1.8	17	1	I06872	ACCESSION:I06872
	53	15	1.7	15	1	CQ821402	ACCESSION:CQ821402
	54	15	1.7	15	1	CQ821408	ACCESSION:CQ821408
c	55	15	1.7	17	1	AX081871	ACCESSION:AX081871
c	56	15	1.7	17	1	AX706658	ACCESSION:AX706658
c	57	15	1.7	17	1	AX707588	ACCESSION:AX707588
	58	15	1.7	17	1	AX732679	ACCESSION:AX732679
c	59	14.4	1.6	17	1	A16196	ACCESSION:A16196
c	60	14.4	1.6	17	1	A16242	ACCESSION:A16242
c	61	14.4	1.6	17	1	BD203207	ACCESSION:BD203207
c	62	14.4	1.6	17	1	BD255579	ACCESSION:BD255579
c	63	14.4	1.6	17	1	BD255582	ACCESSION:BD255582
	64	14.4	1.6	17	1	BD257636	ACCESSION:BD257636
c	65	14.4	1.6	17	1	I23680	ACCESSION:I23680
c	66	14.4	1.6	17	1	I23682	ACCESSION:I23682
c	67	14.4	1.6	17	1	AR433547	ACCESSION:AR433547
c	68	14.4	1.6	17	1	AR433549	ACCESSION:AR433549
c	69	14.4	1.6	17	1	AX216792	ACCESSION:AX216792
	70	14.4	1.6	17	1	AX216884	ACCESSION:AX216884
c	71	14.4	1.6	17	1	AX701183	ACCESSION:AX701183
c	72	14.4	1.6	17	1	AX706656	ACCESSION:AX706656
	73	14.4	1.6	17	1	AX706657	ACCESSION:AX706657
c	74	14.4	1.6	17	1	AX707586	ACCESSION:AX707586
	75	14.4	1.6	17	1	AX707587	ACCESSION:AX707587
	76	14.4	1.6	17	1	AX731809	ACCESSION:AX731809
	77	14.4	1.6	17	1	AX733720	ACCESSION:AX733720
	78	14.4	1.6	17	1	AX735175	ACCESSION:AX735175
	79	14.4	1.6	17	1	AX761994	ACCESSION:AX761994
c	80	14.4	1.6	18	1	CQ784352	ACCESSION:CQ784352
	81	14	1.6	17	1	AR046169	ACCESSION:AR046169
	82	14	1.6	17	1	AR046171	ACCESSION:AR046171
	83	14	1.6	17	1	AR046173	ACCESSION:AR046173
	84	14	1.6	17	1	I53221	ACCESSION:I53221
	85	14	1.6	17	1	I53223	ACCESSION:I53223
	86	14	1.6	17	1	I53225	ACCESSION:I53225
c	87	14	1.6	17	1	AX215042	ACCESSION:AX215042
c	88	14	1.6	17	1	AX215907	ACCESSION:AX215907
c	89	14	1.6	17	1	AX216554	ACCESSION:AX216554
	90	13.8	1.6	17	1	BD257133	ACCESSION:BD257133
	91	13.8	1.6	17	1	BD257134	ACCESSION:BD257134
	92	13.8	1.6	17	1	BD257135	ACCESSION:BD257135
	93	13.8	1.6	17	1	CQ624220	ACCESSION:CQ624220
c	94	13.8	1.6	17	1	I06874	ACCESSION:I06874
c	95	13.8	1.6	17	1	AR190462	ACCESSION:AR190462
c	96	13.8	1.6	17	1	AR325385	ACCESSION:AR325385
c	97	13.8	1.6	17	1	AR327698	ACCESSION:AR327698
	98	13.8	1.6	17	1	AR329394	ACCESSION:AR329394
	99	13.8	1.6	17	1	AR465283	ACCESSION:AR465283
c	100	13.8	1.6	17	1	AX081872	ACCESSION:AX081872
c	101	13.8	1.6	17	1	AX215655	ACCESSION:AX215655
	102	13.8	1.6	17	1	AX265751	ACCESSION:AX265751
c	103	13.8	1.6	17	1	AX265752	ACCESSION:AX265752
	104	13.8	1.6	17	1	AX691936	ACCESSION:AX691936
c	105	13.8	1.6	17	1	AX782232	ACCESSION:AX782232
	106	13.4	1.5	15	1	CQ821404	ACCESSION:CQ821404

107	13.4	1.5	15	1	CQ821409	ACCESSION:CQ821409
c 108	13.4	1.5	16	1	BD178695	ACCESSION:BD178695
c 109	13.4	1.5	16	1	AR328540	ACCESSION:AR328540
110	13.4	1.5	16	1	AX600643	ACCESSION:AX600643
111	13	1.5	13	1	BD263834	ACCESSION:BD263834
112	13	1.5	13	1	BD263836	ACCESSION:BD263836
113	13	1.5	13	1	BD263838	ACCESSION:BD263838
114	13	1.5	13	1	BD263840	ACCESSION:BD263840
115	13	1.5	13	1	AX048320	ACCESSION:AX048320
116	13	1.5	13	1	AX048322	ACCESSION:AX048322
117	13	1.5	13	1	AX048324	ACCESSION:AX048324
118	13	1.5	13	1	AX048326	ACCESSION:AX048326
c 119	13	1.5	16	1	CQ786469	ACCESSION:CQ786469
120	13	1.5	16	1	AR329602	ACCESSION:AR329602
121	12.8	1.5	16	1	A10669	ACCESSION:A10669
122	12.8	1.5	16	1	CQ821403	ACCESSION:CQ821403
c 123	12.8	1.5	16	1	AR328567	ACCESSION:AR328567
124	12.8	1.5	16	1	AR328701	ACCESSION:AR328701
125	12.8	1.5	16	1	AX040892	ACCESSION:AX040892
126	12.4	1.4	14	1	CQ821410	ACCESSION:CQ821410
127	12.4	1.4	14	1	AX081113	ACCESSION:AX081113
c 128	12.4	1.4	15	1	I35229	ACCESSION:I35229
129	12.4	1.4	15	1	AX085048	ACCESSION:AX085048
c 130	12	1.4	14	1	CQ828340	ACCESSION:CQ828340
c 131	12	1.4	15	1	AR133678	ACCESSION:AR133678
132	12	1.4	15	1	I39110	ACCESSION:I39110
c 133	12	1.4	15	1	I80907	ACCESSION:I80907
134	12	1.4	15	1	AX377090	ACCESSION:AX377090
135	12	1.4	15	1	AX635353	ACCESSION:AX635353

ALIGNMENTS

RESULT 1
AR090891
LOCUS AR090891 28 bp DNA linear PAT 07-SEP-2000
DEFINITION Sequence 1011 from patent US 5994076.
ACCESSION AR090891
VERSION AR090891.1 GI:10017646
KEYWORDS .
SOURCE Unknown.
ORGANISM Unknown.
Unclassified.
REFERENCE 1 (bases 1 to 28)
AUTHORS Chenchik,A., Jokhadze,G. and Bibilashvilli,R.
TITLE Methods of assaying differential expression
JOURNAL Patent: US 5994076-A 1011 30-NOV-1999;
FEATURES Location/Qualifiers
source 1. .28
/organism="unknown"
/mol_type="unassigned DNA"

Query Match 3.2%; Score 28; DB 1; Length 28;
Best Local Similarity 100.0%; Pred. No. 6.9;
Matches 28; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 106 AGTGCAGGGCATCATCAATTTCGAGCAG 133
||||||||||||||||||||||||||||
Db 1 AGTGCAGGGCATCATCAATTTCGAGCAG 28

RESULT 2
AR090892/c
LOCUS AR090892 28 bp DNA linear PAT 07-SEP-2000
DEFINITION Sequence 1012 from patent US 5994076.
ACCESSION AR090892
VERSION AR090892.1 GI:10017647
KEYWORDS .
SOURCE Unknown.
ORGANISM Unknown.
Unclassified.
REFERENCE 1 (bases 1 to 28)
AUTHORS Chenchik,A., Jokhadze,G. and Bibilashvilli,R.
TITLE Methods of assaying differential expression
JOURNAL Patent: US 5994076-A 1012 30-NOV-1999;
FEATURES Location/Qualifiers
source 1. .28
/organism="unknown"
/mol_type="unassigned DNA"

Query Match 3.2%; Score 28; DB 1; Length 28;
Best Local Similarity 100.0%; Pred. No. 6.9;
Matches 28; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 376 GATCTCACTCTCAGGAGACCATTGCATC 403
||||||||||||||||||||||||||||
Db 28 GATCTCACTCTCAGGAGACCATTGCATC 1

RESULT 3
AR197926
LOCUS AR197926 28 bp DNA linear PAT 20-APR-2002
DEFINITION Sequence 1011 from patent US 6352829.
ACCESSION AR197926
VERSION AR197926.1 GI:20247775
KEYWORDS .
SOURCE Unknown.
ORGANISM Unknown.
Unclassified.
REFERENCE 1 (bases 1 to 28)
AUTHORS Chenchik,A., Jokhadze,G. and Bibilashvilli,R.
TITLE Methods of assaying differential expression
JOURNAL Patent: US 6352829-A 1011 05-MAR-2002;
FEATURES Location/Qualifiers
source 1. .28
/organism="unknown"
/mol_type="unassigned DNA"

Query Match 3.2%; Score 28; DB 1; Length 28;
Best Local Similarity 100.0%; Pred. No. 6.9;
Matches 28; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 106 AGTGCAGGGCATCATCAATTTCGAGCAG 133
||||||||||||||||||||||||||||
Db 1 AGTGCAGGGCATCATCAATTTCGAGCAG 28

RESULT 4
AR197927/c
LOCUS AR197927 28 bp DNA linear PAT 20-APR-2002
DEFINITION Sequence 1012 from patent US 6352829.
ACCESSION AR197927
VERSION AR197927.1 GI:20247776
KEYWORDS .
SOURCE Unknown.
ORGANISM Unknown.
Unclassified.
REFERENCE 1 (bases 1 to 28)
AUTHORS Chenchik,A., Jokhadze,G. and Bibilashvilli,R.
TITLE Methods of assaying differential expression
JOURNAL Patent: US 6352829-A 1012 05-MAR-2002;
FEATURES Location/Qualifiers
source 1. .28
/organism="unknown"
/mol_type="unassigned DNA"

Query Match 3.2%; Score 28; DB 1; Length 28;
Best Local Similarity 100.0%; Pred. No. 6.9;
Matches 28; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 376 GATCTCACTCTCAGGAGACCATTGCATC 403
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Db 28 GATCTCACTCTCAGGAGACCATTGCATC 1

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RESULT 5
AR260080
LOCUS       AR260080                  28 bp    DNA     linear   PAT 20-DEC-2002
DEFINITION  Sequence 1011 from patent US 6489455.
ACCESSION   AR260080
VERSION     AR260080.1  GI:27310591
KEYWORDS    .
SOURCE      Unknown.
  ORGANISM  Unknown.
            Unclassified.
REFERENCE   1  (bases 1 to 28)
  AUTHORS   Chenchik,A., Jokhadze,G. and Bibilashvilli,R.
  TITLE     Methods of assaying differential expression
  JOURNAL   Patent: US 6489455-A 1011 03-DEC-2002;
FEATURES             Location/Qualifiers
     source          1. .28
                     /organism="unknown"
                     /mol_type="genomic DNA"

  Query Match             3.2%;  Score 28;  DB 1;  Length 28;
  Best Local Similarity   100.0%;  Pred. No. 6.9;
  Matches   28;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        106 AGTGCAGGGCATCATCAATTTCGAGCAG 133
              ||||||||||||||||||||||||||||
Db          1 AGTGCAGGGCATCATCAATTTCGAGCAG 28


RESULT 6
AR260081/c
LOCUS       AR260081                  28 bp    DNA     linear   PAT 20-DEC-2002
DEFINITION  Sequence 1012 from patent US 6489455.
ACCESSION   AR260081
VERSION     AR260081.1  GI:27310592
KEYWORDS    .
SOURCE      Unknown.
  ORGANISM  Unknown.
            Unclassified.
REFERENCE   1  (bases 1 to 28)
  AUTHORS   Chenchik,A., Jokhadze,G. and Bibilashvilli,R.
  TITLE     Methods of assaying differential expression
  JOURNAL   Patent: US 6489455-A 1012 03-DEC-2002;
FEATURES             Location/Qualifiers
     source          1. .28
                     /organism="unknown"
                     /mol_type="genomic DNA"

  Query Match             3.2%;  Score 28;  DB 1;  Length 28;
  Best Local Similarity   100.0%;  Pred. No. 6.9;
  Matches   28;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        376 GATCTCACTCTCAGGAGACCATTGCATC 403
              ||||||||||||||||||||||||||||
Db         28 GATCTCACTCTCAGGAGACCATTGCATC 1


RESULT 7
E06744
LOCUS       E06744                    29 bp    RNA     linear   PAT 29-SEP-1997
DEFINITION  cDNA fragment.
ACCESSION   E06744
VERSION     E06744.1  GI:2174926
KEYWORDS    JP 1994046860-A/2.
SOURCE      Homo sapiens (human)
  ORGANISM  Homo sapiens
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE   1  (bases 1 to 29)
  AUTHORS   Sukenaga,Y., Morino,T., Morita,M., Seya,K. and Nakamura,T.
  TITLE     NEW DNA CAPABLE OF CODING HUMAN SOD AND MICROORGANISM HAVING THE
  JOURNAL   Patent: JP 1994046860-A 2 22-FEB-1994;
            NIPPON KAYAKU CO LTD
COMMENT     OS   Homo sapiens
            PN   JP 1994046860-A/2
            PD   22-FEB-1994
            PF   25-SEP-1992 JP 1992279193
            PI   SUKENAGA YOSHIKAZU, MORINO TOMIO, MORITA MAKOTO, SEYA KENJI,
            PI   NAKAMURA TSUNERO
            PC   C12N15/53,C12N1/21//C12N9/02,(C12N1/21,C12R1:19),(C12N9/02, PC
              C12R1:19);
            CC   strandedness: Double;
            CC   topology: Linear;
            CC   hypothetical: No;
            CC   anti-sense: No;
            CC   *source: tissue_type=placenta;
            FH   Key             Location/Qualifiers
            FH
            FT   5'UTR           1. .29.
FEATURES             Location/Qualifiers
     source          1. .29
                     /organism="Homo sapiens"
                     /mol_type="genomic RNA"
                     /db_xref="taxon:9606"

  Query Match             3.1%;  Score 27.4;  DB 1;  Length 29;
  Best Local Similarity   96.6%;  Pred. No. 8.2;
  Matches   28;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy         39 AGGACCTCGGCGTGGCCTAGCGAGTTATG 67
              |||||| ||||||||||||||||||||||
Db          1 AGGACCACGGCGTGGCCTAGCGAGTTATG 29


RESULT 8
AX473368/c
LOCUS       AX473368                  27 bp    DNA     linear   PAT 09-AUG-2002
DEFINITION  Sequence 1 from Patent WO0203979.
ACCESSION   AX473368
VERSION     AX473368.1  GI:22207996
KEYWORDS    .
SOURCE      synthetic construct
  ORGANISM  synthetic construct
            other sequences; artificial sequences.
REFERENCE   1
  AUTHORS   Huang,P., Plunkett,W.K. and Feng,L.
  TITLE     Cancer therapeutics involving the administration of
            2-methoxyestradiol and an agent that increases intracellular
            superoxide anion
  JOURNAL   Patent: WO 0203979-A 1 17-JAN-2002;
            Board of Regents, The University of Texas System (US)
FEATURES             Location/Qualifiers
     source          1. .27
                     /organism="synthetic construct"
                     /mol_type="unassigned DNA"
                     /db_xref="taxon:32630"
                     /note="Synthetic Primer"

  Query Match             3.1%;  Score 27;  DB 1;  Length 27;
  Best Local Similarity   100.0%;  Pred. No. 8.2;
  Matches   27;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy         61 AGTTATGGCGACGAAGGCCGTGTGCGT 87
              |||||||||||||||||||||||||||
Db         27 AGTTATGGCGACGAAGGCCGTGTGCGT 1


RESULT 9
AR061116/c
LOCUS       AR061116                  24 bp    DNA     linear   PAT 29-SEP-1999
DEFINITION  Sequence 18 from patent US 5843641.
ACCESSION   AR061116
VERSION     AR061116.1  GI:5988807
KEYWORDS    .
SOURCE      Unknown.
  ORGANISM  Unknown.
            Unclassified.
```

```
REFERENCE   1  (bases 1 to 24)
  AUTHORS   Brown,R., Horvitz,H.Robert. and Rosen,D.R.
  TITLE     Methods for the daignosis, of familial amyotrophic lateral
            sclerosis
  JOURNAL   Patent: US 5843641-A 18 01-DEC-1998;
FEATURES             Location/Qualifiers
     source          1. .24
                     /organism="unknown"
                     /mol_type="unassigned DNA"

  Query Match             2.7%;  Score 24;  DB 1;  Length 24;
  Best Local Similarity   100.0%;  Pred. No. 14;
  Matches   24;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        556 CCCTTAACTCATCTGTTATCCTGC 579
              ||||||||||||||||||||||||
Db         24 CCCTTAACTCATCTGTTATCCTGC 1


RESULT 10
AR064690/c
LOCUS       AR064690                  24 bp    DNA     linear   PAT 29-SEP-1999
DEFINITION  Sequence 13 from patent US 5849290.
ACCESSION   AR064690
VERSION     AR064690.1  GI:5994906
KEYWORDS    .
SOURCE      Unknown.
  ORGANISM  Unknown.
            Unclassified.
REFERENCE   1  (bases 1 to 24)
  AUTHORS   Brown,R., Horvitz,H.Robert. and Rosen,D.R.
  TITLE     Compounds and methods for the diagnosis, treatment and prevention
            of diseases of cell death
  JOURNAL   Patent: US 5849290-A 13 15-DEC-1998;
FEATURES             Location/Qualifiers
     source          1. .24
                     /organism="unknown"
                     /mol_type="unassigned DNA"

  Query Match             2.7%;  Score 24;  DB 1;  Length 24;
  Best Local Similarity   100.0%;  Pred. No. 14;
  Matches   24;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        556 CCCTTAACTCATCTGTTATCCTGC 579
              ||||||||||||||||||||||||
Db         24 CCCTTAACTCATCTGTTATCCTGC 1


RESULT 11
AR528355/c
LOCUS       AR528355                  24 bp    DNA     linear   PAT 08-OCT-2004
DEFINITION  Sequence 13 from patent US 6723893.
ACCESSION   AR528355
VERSION     AR528355.1  GI:53916383
KEYWORDS    .
SOURCE      Unknown.
  ORGANISM  Unknown.
            Unclassified.
REFERENCE   1  (bases 1 to 24)
  AUTHORS   Brown,R., Horvitz,H.R. and Rosen,D.R.
  TITLE     Mice having a mutant SOD-1-encoding transgene
  JOURNAL   Patent: US 6723893-A 13 20-APR-2004;
FEATURES             Location/Qualifiers
     source          1. .24
                     /organism="unknown"
                     /mol_type="genomic DNA"

  Query Match             2.7%;  Score 24;  DB 1;  Length 24;
  Best Local Similarity   100.0%;  Pred. No. 14;
  Matches   24;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        556 CCCTTAACTCATCTGTTATCCTGC 579
              ||||||||||||||||||||||||
Db         24 CCCTTAACTCATCTGTTATCCTGC 1


RESULT 12
AX473370
LOCUS       AX473370                  23 bp    DNA     linear   PAT 09-AUG-2002
DEFINITION  Sequence 3 from Patent WO0203979.
ACCESSION   AX473370
VERSION     AX473370.1  GI:22207998
KEYWORDS    .
SOURCE      synthetic construct
  ORGANISM  synthetic construct
            other sequences; artificial sequences.
REFERENCE   1
  AUTHORS   Huang,P., Plunkett,W.K. and Feng,L.
  TITLE     Cancer therapeutics involving the administration of
            2-methoxyestradiol and an agent that increases intracellular
            superoxide anion
  JOURNAL   Patent: WO 0203979-A 3 17-JAN-2002;
            Board of Regents, The University of Texas System (US)
FEATURES             Location/Qualifiers
     source          1. .23
                     /organism="synthetic construct"
                     /mol_type="unassigned DNA"
                     /db_xref="taxon:32630"
                     /note="Synthetic Primer"

  Query Match             2.6%;  Score 23;  DB 1;  Length 23;
  Best Local Similarity   100.0%;  Pred. No. 16;
  Matches   23;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy         71 ACGAAGGCCGTGTGCGTGCTGAA 93
              |||||||||||||||||||||||
Db          1 ACGAAGGCCGTGTGCGTGCTGAA 23


RESULT 13
AX473371/c
LOCUS       AX473371                  23 bp    DNA     linear   PAT 09-AUG-2002
DEFINITION  Sequence 4 from Patent WO0203979.
ACCESSION   AX473371
VERSION     AX473371.1  GI:22207999
KEYWORDS    .
SOURCE      synthetic construct
  ORGANISM  synthetic construct
            other sequences; artificial sequences.
REFERENCE   1
  AUTHORS   Huang,P., Plunkett,W.K. and Feng,L.
  TITLE     Cancer therapeutics involving the administration of
            2-methoxyestradiol and an agent that increases intracellular
            superoxide anion
  JOURNAL   Patent: WO 0203979-A 4 17-JAN-2002;
            Board of Regents, The University of Texas System (US)
FEATURES             Location/Qualifiers
     source          1. .23
                     /organism="synthetic construct"
                     /mol_type="unassigned DNA"
                     /db_xref="taxon:32630"
                     /note="Synthetic Primer"

  Query Match             2.6%;  Score 23;  DB 1;  Length 23;
  Best Local Similarity   100.0%;  Pred. No. 16;
  Matches   23;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        486 CTGGAAGTCGTTTGGCTTGTGGT 508
              |||||||||||||||||||||||
Db         23 CTGGAAGTCGTTTGGCTTGTGGT 1


RESULT 14
AX710079
LOCUS       AX710079                  23 bp    DNA     linear   PAT 10-APR-2003
DEFINITION  Sequence 5 from Patent WO03016527.
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ACCESSION   AX710079
VERSION     AX710079.1  GI:29786676
KEYWORDS    .
SOURCE      Homo sapiens (human)
  ORGANISM  Homo sapiens
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE   1
  AUTHORS   Pincemail,J., Piette,J. and Marechal,D.
  TITLE     Process for the detection of oxidative stress and kit for its
            implementation
  JOURNAL   Patent: WO 03016527-A 5 27-FEB-2003;
            Probiox SA (BE)
FEATURES             Location/Qualifiers
     source          1. .23
                     /organism="Homo sapiens"
                     /mol_type="unassigned DNA"
                     /db_xref="taxon:9606"

  Query Match             2.6%;  Score 23;  DB 1;  Length 23;
  Best Local Similarity   100.0%;  Pred. No. 16;
  Matches   23;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        321 GCAATGTGACTGCTGACAAAGAT 343
              |||||||||||||||||||||||
Db          1 GCAATGTGACTGCTGACAAAGAT 23


RESULT 15
AX710080/c
LOCUS       AX710080                  23 bp    DNA     linear   PAT 10-APR-2003
DEFINITION  Sequence 6 from Patent WO03016527.
ACCESSION   AX710080
VERSION     AX710080.1  GI:29786677
KEYWORDS    .
SOURCE      Homo sapiens (human)
  ORGANISM  Homo sapiens
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE   1
  AUTHORS   Pincemail,J., Piette,J. and Marechal,D.
  TITLE     Process for the detection of oxidative stress and kit for its
            implementation
  JOURNAL   Patent: WO 03016527-A 6 27-FEB-2003;
            Probiox SA (BE)
FEATURES             Location/Qualifiers
     source          1. .23
                     /organism="Homo sapiens"
                     /mol_type="unassigned DNA"
                     /db_xref="taxon:9606"

  Query Match             2.6%;  Score 23;  DB 1;  Length 23;
  Best Local Similarity   100.0%;  Pred. No. 16;
  Matches   23;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        383 CTCTCAGGAGACCATTGCATCAT 405
              |||||||||||||||||||||||
Db         23 CTCTCAGGAGACCATTGCATCAT 1


RESULT 16
A06400/c
LOCUS       A06400                    25 bp    DNA     linear   PAT 18-JUN-1993
DEFINITION  Oligonucleotide primer.
ACCESSION   A06400
VERSION     A06400.1  GI:412849
KEYWORDS    .
SOURCE      synthetic construct
  ORGANISM  synthetic construct
            other sequences; artificial sequences.
REFERENCE   1  (bases 1 to 25)
  AUTHORS   .
  JOURNAL   Patent: WO 9000605-A 8 25-JAN-1990;
FEATURES             Location/Qualifiers
     source          1. .25
                     /organism="synthetic construct"
                     /mol_type="unassigned DNA"
                     /db_xref="taxon:32630"

  Query Match             2.5%;  Score 21.8;  DB 1;  Length 25;
  Best Local Similarity   92.0%;  Pred. No. 23;
  Matches   23;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        418 GGTGGTCCATGAAAAAGCAGATGAC 442
              |||||| ||||||| ||||||||||
Db         25 GGTGGTTCATGAAAGAGCAGATGAC 1


RESULT 17
AR364465/c
LOCUS       AR364465                  25 bp    DNA     linear   PAT 03-SEP-2003
DEFINITION  Sequence 19 from patent US 5290690.
ACCESSION   AR364465
VERSION     AR364465.1  GI:34427112
KEYWORDS    .
SOURCE      Unknown.
  ORGANISM  Unknown.
            Unclassified.
REFERENCE   1  (bases 1 to 25)
  AUTHORS   Mrabet,N., Lasters,I., Stanssens,P., Matthyssens,G., Wodak,S. and
            Quax,W.J.
  TITLE     Methods and means for controlling the stability of proteins
  JOURNAL   Patent: US 5290690-A 19 01-MAR-1994;
FEATURES             Location/Qualifiers
     source          1. .25
                     /organism="unknown"
                     /mol_type="genomic DNA"

  Query Match             2.5%;  Score 21.8;  DB 1;  Length 25;
  Best Local Similarity   92.0%;  Pred. No. 23;
  Matches   23;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        418 GGTGGTCCATGAAAAAGCAGATGAC 442
              |||||| ||||||| ||||||||||
Db         25 GGTGGTTCATGAAAGAGCAGATGAC 1


RESULT 18
BD144206/c
LOCUS       BD144206                  21 bp    DNA     linear   PAT 17-JAN-2003
DEFINITION  ALS model rat.
ACCESSION   BD144206
VERSION     BD144206.1  GI:27849964
KEYWORDS    JP 2002142610-A/2.
SOURCE      synthetic construct
  ORGANISM  synthetic construct
            other sequences; artificial sequences.
REFERENCE   1  (bases 1 to 21)
  AUTHORS   Aoki,M., Itoyama,Y., Miyoshi,I. and Kasai,N.
  TITLE     ALS model rat
  JOURNAL   Patent: JP 2002142610-A 2 21-MAY-2002;
            TOHOKU TECHNO ARCH CO LTD
COMMENT     OS   Artificial Sequence
            PN   JP 2002142610-A/2
            PD   21-MAY-2002
            PF   07-NOV-2000 JP 2000339567
            PI   MASASHI AOKI,YASUHITO ITOYAMA,ICHIRO MIYOSHI,NORIYUKI KASAI PC
              A01K67/027,A61K45/00,A61P25/02,C12N5/10,C12N15/09//(C12N5/10, PC
             C12R1:91),
            PC   C12N5/00,C12N15/00,(C12N5/00,C12R1:91)
            CC   Description of Artificial Sequence:Oligonucleotide to act as a

            CC           primer for
            CC   PCR
            FH   Key             Location/Qualifiers
            FT   source          1. .21
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          FT                   /organism='Artificial Sequence'.
FEATURES             Location/Qualifiers
     source          1. .21
                     /organism="synthetic construct"
                     /mol_type="genomic DNA"
                     /db_xref="taxon:32630"

  Query Match             2.4%;  Score 21;  DB 1;  Length 21;
  Best Local Similarity   100.0%;  Pred. No. 23;
  Matches   21;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        564 TCATCTGTTATCCTGCTAGCT 584
              |||||||||||||||||||||
Db         21 TCATCTGTTATCCTGCTAGCT 1


RESULT 19
BD144209/c
LOCUS       BD144209                 22 bp    DNA     linear   PAT 17-JAN-2003
DEFINITION  ALS model rat.
ACCESSION   BD144209
VERSION     BD144209.1  GI:27849967
KEYWORDS    JP 2002142610-A/5.
SOURCE      synthetic construct
  ORGANISM  synthetic construct
            other sequences; artificial sequences.
REFERENCE   1  (bases 1 to 22)
  AUTHORS   Aoki,M., Itoyama,Y., Miyoshi,I. and Kasai,N.
  TITLE     ALS model rat
  JOURNAL   Patent: JP 2002142610-A 5 21-MAY-2002;
            TOHOKU TECHNO ARCH CO LTD
COMMENT     OS   Artificial Sequence
            PN   JP 2002142610-A/5
            PD   21-MAY-2002
            PF   07-NOV-2000 JP 2000339567
            PI   MASASHI AOKI,YASUHITO ITOYAMA,ICHIRO MIYOSHI,NORIYUKI KASAI PC
              A01K67/027,A61K45/00,A61P25/02,C12N5/10,C12N15/09//(C12N5/10, PC
             C12R1:91),
            PC   C12N5/00,C12N15/00,(C12N5/00,C12R1:91)
            CC   Description of Artificial Sequence:Oligonucleotide to act as a

            CC             primer for
            CC   PCR
            FH   Key             Location/Qualifiers
            FT   source          1. .22
            FT                   /organism='Artificial Sequence'.
FEATURES             Location/Qualifiers
     source          1. .22
                     /organism="synthetic construct"
                     /mol_type="genomic DNA"
                     /db_xref="taxon:32630"

  Query Match             2.3%;  Score 20.4;  DB 1;  Length 22;
  Best Local Similarity   95.5%;  Pred. No. 27;
  Matches   21;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        193 GCATGGATTCCATGTTCATGAG 214
              |||||||||| |||||||||
Db         22 GCATGGATTCCGTGTTCATGAG 1


RESULT 20
AR061103/c
LOCUS       AR061103                 21 bp    DNA     linear   PAT 29-SEP-1999
DEFINITION  Sequence 5 from patent US 5843641.
ACCESSION   AR061103
VERSION     AR061103.1  GI:5988794
KEYWORDS    .
SOURCE      Unknown.
  ORGANISM  Unknown.
            Unclassified.
REFERENCE   1  (bases 1 to 21)
  AUTHORS   Brown,R., Horvitz,H.Robert. and Rosen,D.R.
  TITLE     Methods for the daignosis, of familial amyotrophic lateral
            sclerosis
  JOURNAL   Patent: US 5843641-A 5 01-DEC-1998;
FEATURES             Location/Qualifiers
     source          1. .21
                     /organism="unknown"
                     /mol_type="unassigned DNA"

  Query Match             2.3%;  Score 20;  DB 1;  Length 21;
  Best Local Similarity   100.0%;  Pred. No. 28;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        118 CATCAATTTCGAGCAGAAGG 137
              ||||||||||||||||||||
Db         21 CATCAATTTCGAGCAGAAGG 2


RESULT 21
AR064682/c
LOCUS       AR064682                 21 bp    DNA     linear   PAT 29-SEP-1999
DEFINITION  Sequence 5 from patent US 5849290.
ACCESSION   AR064682
VERSION     AR064682.1  GI:5994898
KEYWORDS    .
SOURCE      Unknown.
  ORGANISM  Unknown.
            Unclassified.
REFERENCE   1  (bases 1 to 21)
  AUTHORS   Brown,R., Horvitz,H.Robert. and Rosen,D.R.
  TITLE     Compounds and methods for the diagnosis, treatment and prevention
            of diseases of cell death
  JOURNAL   Patent: US 5849290-A 5 15-DEC-1998;
FEATURES             Location/Qualifiers
     source          1. .21
                     /organism="unknown"
                     /mol_type="unassigned DNA"

  Query Match             2.3%;  Score 20;  DB 1;  Length 21;
  Best Local Similarity   100.0%;  Pred. No. 28;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        118 CATCAATTTCGAGCAGAAGG 137
              ||||||||||||||||||||
Db         21 CATCAATTTCGAGCAGAAGG 2


RESULT 22
I04213
LOCUS       I04213                   21 bp    DNA     linear   PAT 02-DEC-1994
DEFINITION  Sequence 9 from Patent EP 0138111.
ACCESSION   I04213
VERSION     I04213.1  GI:591830
KEYWORDS    .
SOURCE      Unknown.
  ORGANISM  Unknown.
            Unclassified.
REFERENCE   1  (bases 1 to 21)
  AUTHORS   Hallewell,R.A. and Mullenbach,G.T.
  TITLE     Superoxide dismutase cloning and expression in microorganisms
  JOURNAL   Patent: EP 0138111-A1 9 24-APR-1985;
FEATURES             Location/Qualifiers
     source          1. .21
                     /organism="unknown"
                     /mol_type="unassigned DNA"

  Query Match             2.3%;  Score 20;  DB 1;  Length 21;
  Best Local Similarity   100.0%;  Pred. No. 28;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        723 CTCAGTTAAAATGTCTGTTT 742
              ||||||||||||||||||||
Db          1 CTCAGTTAAAATGTCTGTTT 20
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RESULT 23
I06878
LOCUS       I06878                    21 bp    DNA     linear   PAT 02-DEC-1994
DEFINITION  Sequence 9 from Patent EP 0340805.
ACCESSION   I06878
VERSION     I06878.1  GI:589855
KEYWORDS    .
SOURCE      Unknown.
  ORGANISM  Unknown.
            Unclassified.
REFERENCE   1  (bases 1 to 21)
  AUTHORS   Hallewell,R.A. and Mullenbach,G.T.
  TITLE     Superoxide dismutase and expression in microorganisms
  JOURNAL   Patent: EP 0340805-A1 9 08-NOV-1989;
FEATURES             Location/Qualifiers
     source          1. .21
                     /organism="unknown"
                     /mol_type="unassigned DNA"

  Query Match             2.3%;  Score 20;  DB 1;  Length 21;
  Best Local Similarity   100.0%;  Pred. No. 28;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        723 CTCAGTTAAAATGTCTGTTT 742
              ||||||||||||||||||||
Db          1 CTCAGTTAAAATGTCTGTTT 20


RESULT 24
AR528347/c
LOCUS       AR528347                  21 bp    DNA     linear   PAT 08-OCT-2004
DEFINITION  Sequence 5 from patent US 6723893.
ACCESSION   AR528347
VERSION     AR528347.1  GI:53916375
KEYWORDS    .
SOURCE      Unknown.
  ORGANISM  Unknown.
            Unclassified.
REFERENCE   1  (bases 1 to 21)
  AUTHORS   Brown,R., Horvitz,H.R. and Rosen,D.R.
  TITLE     Mice having a mutant SOD-1-encoding transgene
  JOURNAL   Patent: US 6723893-A 5 20-APR-2004;
FEATURES             Location/Qualifiers
     source          1. .21
                     /organism="unknown"
                     /mol_type="genomic DNA"

  Query Match             2.3%;  Score 20;  DB 1;  Length 21;
  Best Local Similarity   100.0%;  Pred. No. 28;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        118 CATCAATTTCGAGCAGAAGG 137
              ||||||||||||||||||||
Db         21 CATCAATTTCGAGCAGAAGG 2


RESULT 25
BD174099
LOCUS       BD174099                  23 bp    DNA     linear   PAT 18-FEB-2003
DEFINITION  Method of treating disease in association with decrease in the
            expression of AOP-1 gene or AOP-1 and remedies for the disease.
ACCESSION   BD174099
VERSION     BD174099.1  GI:28415434
KEYWORDS    WO 02064169-A/12.
SOURCE      synthetic construct
  ORGANISM  synthetic construct
            other sequences; artificial sequences.
REFERENCE   1  (bases 1 to 23)
  AUTHORS   Hattori,F., Sugimura,K. and Furuya,M.
  TITLE     Method of treating disease in association with decrease in the
            expression of AOP-1 gene or AOP-1 and remedies for the disease
  JOURNAL   Patent: WO 02064169-A 12 22-AUG-2002;
            SUNTORY LTD,SUNTORY BIOMEDICAL RESEACH LTD,FUMIYUKI HATTORI,
            KEIJIRO SUGIMURA,MAYUMI FURUYA
COMMENT     OS   Artificial Sequence
            PN   WO 02064169-A/12
            PD   22-AUG-2002
            PF   18-FEB-2002 WO 2002JP001358
            PR   16-FEB-2001 JP 01P   041003
            PI   FUMIYUKI HATTORI,KEIJIRO SUGIMURA,MAYUMI FURUYA PC
            A61K48/00,A61K31/711,A61K38/17,A61P9/02,A61P9/10,A61P29/00, PC
            A61P19/02,
            PC   A61P25/00,A61P1/16,A61P13/12,G01N33/15,G01N33/50//C12N15/12 CC
              Method of treating disease in association
            with decrease in the
            CC            expression
            CC   of AOP-1 gene or AOP-1 and remedies for the disease FH   Key
                      Location/Qualifiers
            FT   source          1. .23
            FT                   /organism='Artificial Sequence'.
FEATURES             Location/Qualifiers
     source          1. .23
                     /organism="synthetic construct"
                     /mol_type="genomic DNA"
                     /db_xref="taxon:32630"

  Query Match             2.3%;  Score 19.8;  DB 1;  Length 23;
  Best Local Similarity   91.3%;  Pred. No. 33;
  Matches   21;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        310 TGGAGACTTGGGCAATGTGACTG 332
              ||||||| |||||||||||| |||
Db          1 TGGAGACCTGGGCAATGTGGCTG 23


RESULT 26
BD144208/c
LOCUS       BD144208                  19 bp    DNA     linear   PAT 17-JAN-2003
DEFINITION  ALS model rat.
ACCESSION   BD144208
VERSION     BD144208.1  GI:27849966
KEYWORDS    JP 2002142610-A/4.
SOURCE      synthetic construct
  ORGANISM  synthetic construct
            other sequences; artificial sequences.
REFERENCE   1  (bases 1 to 19)
  AUTHORS   Aoki,M., Itoyama,Y., Miyoshi,I. and Kasai,N.
  TITLE     ALS model rat
  JOURNAL   Patent: JP 2002142610-A 4 21-MAY-2002;
            TOHOKU TECHNO ARCH CO LTD
COMMENT     OS   Artificial Sequence
            PN   JP 2002142610-A/4
            PD   21-MAY-2002
            PF   07-NOV-2000 JP 2000339567
            PI   MASASHI AOKI,YASUHITO ITOYAMA,ICHIRO MIYOSHI,NORIYUKI KASAI PC
              A01K67/027,A61K45/00,A61P25/02,C12N5/10,C12N15/09//(C12N5/10, PC
             C12R1:91),
            PC   C12N5/00,C12N15/00,(C12N5/00,C12R1:91)
            CC   Description of Artificial Sequence:Oligonucleotide to act as a

            CC            primer for
            CC   PCR
            FH   Key             Location/Qualifiers
            FT   source          1. .19
            FT                   /organism='Artificial Sequence'.
FEATURES             Location/Qualifiers
     source          1. .19
                     /organism="synthetic construct"
                     /mol_type="genomic DNA"
                     /db_xref="taxon:32630"

  Query Match             2.2%;  Score 19;  DB 1;  Length 19;
  Best Local Similarity   100.0%;  Pred. No. 31;
  Matches   19;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;
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Qy        547 GTCTGAGGCCCCTTAACTC 565
              ||||||||||||||||||
Db         19 GTCTGAGGCCCCTTAACTC 1


RESULT 27
AX671956
LOCUS       AX671956                  17 bp    DNA     linear   PAT 27-MAR-2003
DEFINITION  Sequence 401 from Patent WO03004526.
ACCESSION   AX671956
VERSION     AX671956.1  GI:29330304
KEYWORDS    .
SOURCE      Homo sapiens (human)
  ORGANISM  Homo sapiens
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE   1
  AUTHORS   Telerman,A., Amson,R. and Tuijnder,M.
  TITLE     Sequences involved in phenomena of tumour suppression, tumour
            reversion, apoptosis and/or resistance to viruses and their use as
            medicines
  JOURNAL   Patent: WO 03004526-A 401 16-JAN-2003;
            Molecular Engines Laboratories (FR)
FEATURES             Location/Qualifiers
     source          1. .17
                     /organism="Homo sapiens"
                     /mol_type="unassigned DNA"
                     /db_xref="taxon:9606"

  Query Match             1.9%;  Score 17;  DB 1;  Length 17;
  Best Local Similarity   100.0%;  Pred. No. 42;
  Matches   17;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        690 GATCACTTGGAAGATTT 706
              |||||||||||||||||
Db          1 GATCACTTGGAAGATTT 17


RESULT 28
AX673655
LOCUS       AX673655                  17 bp    DNA     linear   PAT 27-MAR-2003
DEFINITION  Sequence 2100 from Patent WO03004526.
ACCESSION   AX673655
VERSION     AX673655.1  GI:29332003
KEYWORDS    .
SOURCE      Homo sapiens (human)
  ORGANISM  Homo sapiens
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE   1
  AUTHORS   Telerman,A., Amson,R. and Tuijnder,M.
  TITLE     Sequences involved in phenomena of tumour suppression, tumour
            reversion, apoptosis and/or resistance to viruses and their use as
            medicines
  JOURNAL   Patent: WO 03004526-A 2100 16-JAN-2003;
            Molecular Engines Laboratories (FR)
FEATURES             Location/Qualifiers
     source          1. .17
                     /organism="Homo sapiens"
                     /mol_type="unassigned DNA"
                     /db_xref="taxon:9606"

  Query Match             1.9%;  Score 17;  DB 1;  Length 17;
  Best Local Similarity   100.0%;  Pred. No. 42;
  Matches   17;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        517 GATCGCCCAATAAACAT 533
              |||||||||||||||||
Db          1 GATCGCCCAATAAACAT 17


RESULT 29
AX730213/c
LOCUS       AX730213                  17 bp    DNA     linear   PAT 08-MAY-2003
DEFINITION  Sequence 1847 from Patent WO03025175.
ACCESSION   AX730213
VERSION     AX730213.1  GI:30509556
KEYWORDS    .
SOURCE      Homo sapiens (human)
  ORGANISM  Homo sapiens
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE   1
  AUTHORS   Telerman,A., Amson,R. and Tuijnder,M.
  TITLE     Sequences involved in phenomena of tumour suppression, tumour
            reversion, apoptosis and/or virus resistance and their use as
            medicines
  JOURNAL   Patent: WO 03025175-A 1847 27-MAR-2003;
            Molecular Engines Laboratories (FR)
FEATURES             Location/Qualifiers
     source          1. .17
                     /organism="Homo sapiens"
                     /mol_type="unassigned DNA"
                     /db_xref="taxon:9606"

  Query Match             1.9%;  Score 17;  DB 1;  Length 17;
  Best Local Similarity   100.0%;  Pred. No. 42;
  Matches   17;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        363 TTGAAGATTCTGTGATC 379
              |||||||||||||||||
Db         17 TTGAAGATTCTGTGATC 1


RESULT 30
AX733568
LOCUS       AX733568                  17 bp    DNA     linear   PAT 08-MAY-2003
DEFINITION  Sequence 5202 from Patent WO03025175.
ACCESSION   AX733568
VERSION     AX733568.1  GI:30512911
KEYWORDS    .
SOURCE      Homo sapiens (human)
  ORGANISM  Homo sapiens
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE   1
  AUTHORS   Telerman,A., Amson,R. and Tuijnder,M.
  TITLE     Sequences involved in phenomena of tumour suppression, tumour
            reversion, apoptosis and/or virus resistance and their use as
            medicines
  JOURNAL   Patent: WO 03025175-A 5202 27-MAR-2003;
            Molecular Engines Laboratories (FR)
FEATURES             Location/Qualifiers
     source          1. .17
                     /organism="Homo sapiens"
                     /mol_type="unassigned DNA"
                     /db_xref="taxon:9606"

  Query Match             1.9%;  Score 17;  DB 1;  Length 17;
  Best Local Similarity   100.0%;  Pred. No. 42;
  Matches   17;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        690 GATCACTTGGAAGATTT 706
              |||||||||||||||||
Db          1 GATCACTTGGAAGATTT 17


RESULT 31
AX736487
LOCUS       AX736487                  17 bp    DNA     linear   PAT 08-MAY-2003
DEFINITION  Sequence 2077 from Patent WO03025177.
ACCESSION   AX736487
VERSION     AX736487.1  GI:30515775
KEYWORDS    .
SOURCE      Homo sapiens (human)
  ORGANISM  Homo sapiens
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            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE   1
  AUTHORS   Telerman,A., Amson,R. and Tuijnder,M.
  TITLE     Sequences involved in phenomena of tumour suppression, tumour
            reversion, apoptosis and/or resistance to viruses and the use
            thereof as medicaments
  JOURNAL   Patent: WO 03025177-A 2077 27-MAR-2003;
            Molecular Engines Laboratories (FR)
FEATURES             Location/Qualifiers
     source          1. .17
                     /organism="Homo sapiens"
                     /mol_type="unassigned DNA"
                     /db_xref="taxon:9606"

  Query Match             1.9%;  Score 17;  DB 1;  Length 17;
  Best Local Similarity   100.0%;  Pred. No. 42;
  Matches   17;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        690 GATCACTTGGAAGATTT 706
              |||||||||||||||||
Db          1 GATCACTTGGAAGATTT 17


RESULT 32
AX739220
LOCUS       AX739220                 17 bp    DNA     linear   PAT 08-MAY-2003
DEFINITION  Sequence 4810 from Patent WO03025177.
ACCESSION   AX739220
VERSION     AX739220.1  GI:30518517
KEYWORDS    .
SOURCE      Homo sapiens (human)
  ORGANISM  Homo sapiens
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE   1
  AUTHORS   Telerman,A., Amson,R. and Tuijnder,M.
  TITLE     Sequences involved in phenomena of tumour suppression, tumour
            reversion, apoptosis and/or resistance to viruses and the use
            thereof as medicaments
  JOURNAL   Patent: WO 03025177-A 4810 27-MAR-2003;
            Molecular Engines Laboratories (FR)
FEATURES             Location/Qualifiers
     source          1. .17
                     /organism="Homo sapiens"
                     /mol_type="unassigned DNA"
                     /db_xref="taxon:9606"

  Query Match             1.9%;  Score 17;  DB 1;  Length 17;
  Best Local Similarity   100.0%;  Pred. No. 42;
  Matches   17;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        517 GATCGCCCAATAAACAT 533
              |||||||||||||||||
Db          1 GATCGCCCAATAAACAT 17


RESULT 33
BD174097
LOCUS       BD174097                 19 bp    DNA     linear   PAT 18-FEB-2003
DEFINITION  Method of treating disease in association with decrease in the
            expression of AOP-1 gene or AOP-1 and remedies for the disease.
ACCESSION   BD174097
VERSION     BD174097.1  GI:28415432
KEYWORDS    WO 02064169-A/10.
SOURCE      synthetic construct
  ORGANISM  synthetic construct
            other sequences; artificial sequences.
REFERENCE   1  (bases 1 to 19)
  AUTHORS   Hattori,F., Sugimura,K. and Furuya,M.
  TITLE     Method of treating disease in association with decrease in the
            expression of AOP-1 gene or AOP-1 and remedies for the disease
  JOURNAL   Patent: WO 02064169-A 10 22-AUG-2002;
            SUNTORY LTD,SUNTORY BIOMEDICAL RESEACH LTD,FUMIYUKI HATTORI,
            KEIJIRO SUGIMURA,MAYUMI FURUYA
COMMENT     OS   Artificial Sequence
            PN   WO 02064169-A/10
            PD   22-AUG-2002
            PF   18-FEB-2002 WO 2002JP001358
            PR   16-FEB-2001 JP 01P   041003
            PI   FUMIYUKI HATTORI,KEIJIRO SUGIMURA,MAYUMI FURUYA PC
            A61K48/00,A61K31/711,A61K38/17,A61P9/02,A61P9/10,A61P29/00, PC
            A61P19/02,
            PC   A61P25/00,A61P1/16,A61P13/12,G01N33/15,G01N33/50//C12N15/12 CC
              Method of treating disease in association
            with decrease in the
            CC           expression
            CC   of AOP-1 gene or AOP-1 and remedies for the disease FH   Key
                      Location/Qualifiers
            FT   source          1. .19
            FT                   /organism='Artificial Sequence'.
FEATURES             Location/Qualifiers
     source          1. .19
                     /organism="synthetic construct"
                     /mol_type="genomic DNA"
                     /db_xref="taxon:32630"

  Query Match             1.9%;  Score 17;  DB 1;  Length 19;
  Best Local Similarity   100.0%;  Pred. No. 48;
  Matches   17;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        292 GGATGAAGAGAGGCATG 308
              |||||||||||||||||
Db          3 GGATGAAGAGAGGCATG 19


RESULT 34
AR061105/c
LOCUS       AR061105                 21 bp    DNA     linear   PAT 29-SEP-1999
DEFINITION  Sequence 7 from patent US 5843641.
ACCESSION   AR061105
VERSION     AR061105.1  GI:5988796
KEYWORDS    .
SOURCE      Unknown.
  ORGANISM  Unknown.
            Unclassified.
REFERENCE   1  (bases 1 to 21)
  AUTHORS   Brown,R., Horvitz,H.Robert. and Rosen,D.R.
  TITLE     Methods for the daignosis, of familial amyotrophic lateral
            sclerosis
  JOURNAL   Patent: US 5843641-A 7 01-DEC-1998;
FEATURES             Location/Qualifiers
     source          1. .21
                     /organism="unknown"
                     /mol_type="unassigned DNA"

  Query Match             1.9%;  Score 17;  DB 1;  Length 21;
  Best Local Similarity   100.0%;  Pred. No. 53;
  Matches   17;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        218 GGAGATAATACAGCAGG 234
              |||||||||||||||||
Db         21 GGAGATAATACAGCAGG 5


RESULT 35
AR064684/c
LOCUS       AR064684                 21 bp    DNA     linear   PAT 29-SEP-1999
DEFINITION  Sequence 7 from patent US 5849290.
ACCESSION   AR064684
VERSION     AR064684.1  GI:5994900
KEYWORDS    .
SOURCE      Unknown.
  ORGANISM  Unknown.
            Unclassified.
REFERENCE   1  (bases 1 to 21)
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```
  AUTHORS   Brown,R., Horvitz,H.Robert. and Rosen,D.R.
  TITLE     Compounds and methods for the diagnosis, treatment and prevention
            of diseases of cell death
  JOURNAL   Patent: US 5849290-A 7 15-DEC-1998;
FEATURES             Location/Qualifiers
     source          1. .21
                     /organism="unknown"
                     /mol_type="unassigned DNA"

  Query Match             1.9%;  Score 17;  DB 1;  Length 21;
  Best Local Similarity   100.0%;  Pred. No. 53;
  Matches   17;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        218 GGAGATAATACAGCAGG 234
              |||||||||||||||||
Db         21 GGAGATAATACAGCAGG 5


RESULT 36
AR528349/c
LOCUS       AR528349                  21 bp    DNA     linear   PAT 08-OCT-2004
DEFINITION  Sequence 7 from patent US 6723893.
ACCESSION   AR528349
VERSION     AR528349.1  GI:53916377
KEYWORDS    .
SOURCE      Unknown.
  ORGANISM  Unknown.
            Unclassified.
REFERENCE   1  (bases 1 to 21)
  AUTHORS   Brown,R., Horvitz,H.R. and Rosen,D.R.
  TITLE     Mice having a mutant SOD-1-encoding transgene
  JOURNAL   Patent: US 6723893-A 7 20-APR-2004;
FEATURES             Location/Qualifiers
     source          1. .21
                     /organism="unknown"
                     /mol_type="genomic DNA"

  Query Match             1.9%;  Score 17;  DB 1;  Length 21;
  Best Local Similarity   100.0%;  Pred. No. 53;
  Matches   17;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        218 GGAGATAATACAGCAGG 234
              |||||||||||||||||
Db         21 GGAGATAATACAGCAGG 5


RESULT 37
AR338227/c
LOCUS       AR338227                  20 bp    DNA     linear   PAT 17-AUG-2003
DEFINITION  Sequence 48 from patent US 6569618.
ACCESSION   AR338227
VERSION     AR338227.1  GI:33724978
KEYWORDS    .
SOURCE      Unknown.
  ORGANISM  Unknown.
            Unclassified.
REFERENCE   1  (bases 1 to 20)
  AUTHORS   Yasue,H. and Yoshimura,M.
  TITLE     Diagnosis of diseases associated with coronary twitching
  JOURNAL   Patent: US 6569618-A 48 27-MAY-2003;
FEATURES             Location/Qualifiers
     source          1. .20
                     /organism="unknown"
                     /mol_type="genomic DNA"

  Query Match             1.9%;  Score 16.8;  DB 1;  Length 20;
  Best Local Similarity   90.0%;  Pred. No. 52;
  Matches   18;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        168 GCATTAAAGGACTGACTGAA 187
              ||| |||||||||| |||||
Db         20 GCACTAAAGGACTGCCTGAA 1


RESULT 38
AR061108
LOCUS       AR061108                  21 bp    DNA     linear   PAT 29-SEP-1999
DEFINITION  Sequence 10 from patent US 5843641.
ACCESSION   AR061108
VERSION     AR061108.1  GI:5988799
KEYWORDS    .
SOURCE      Unknown.
  ORGANISM  Unknown.
            Unclassified.
REFERENCE   1  (bases 1 to 21)
  AUTHORS   Brown,R., Horvitz,H.Robert. and Rosen,D.R.
  TITLE     Methods for the daignosis, of familial amyotrophic lateral
            sclerosis
  JOURNAL   Patent: US 5843641-A 10 01-DEC-1998;
FEATURES             Location/Qualifiers
     source          1. .21
                     /organism="unknown"
                     /mol_type="unassigned DNA"

  Query Match             1.9%;  Score 16.8;  DB 1;  Length 21;
  Best Local Similarity   90.0%;  Pred. No. 55;
  Matches   18;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        298 AGAGAGGCATGTTGGAGACT 317
              | | |||||||||||||||||
Db          2 ATATAGGCATGTTGGAGACT 21


RESULT 39
AR064687
LOCUS       AR064687                  21 bp    DNA     linear   PAT 29-SEP-1999
DEFINITION  Sequence 10 from patent US 5849290.
ACCESSION   AR064687
VERSION     AR064687.1  GI:5994903
KEYWORDS    .
SOURCE      Unknown.
  ORGANISM  Unknown.
            Unclassified.
REFERENCE   1  (bases 1 to 21)
  AUTHORS   Brown,R., Horvitz,H.Robert. and Rosen,D.R.
  TITLE     Compounds and methods for the diagnosis, treatment and prevention
            of diseases of cell death
  JOURNAL   Patent: US 5849290-A 10 15-DEC-1998;
FEATURES             Location/Qualifiers
     source          1. .21
                     /organism="unknown"
                     /mol_type="unassigned DNA"

  Query Match             1.9%;  Score 16.8;  DB 1;  Length 21;
  Best Local Similarity   90.0%;  Pred. No. 55;
  Matches   18;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        298 AGAGAGGCATGTTGGAGACT 317
              | | |||||||||||||||||
Db          2 ATATAGGCATGTTGGAGACT 21


RESULT 40
AR528352
LOCUS       AR528352                  21 bp    DNA     linear   PAT 08-OCT-2004
DEFINITION  Sequence 10 from patent US 6723893.
ACCESSION   AR528352
VERSION     AR528352.1  GI:53916380
KEYWORDS    .
SOURCE      Unknown.
  ORGANISM  Unknown.
            Unclassified.
REFERENCE   1  (bases 1 to 21)
  AUTHORS   Brown,R., Horvitz,H.R. and Rosen,D.R.
  TITLE     Mice having a mutant SOD-1-encoding transgene
  JOURNAL   Patent: US 6723893-A 10 20-APR-2004;
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FEATURES             Location/Qualifiers
     source          1. .21
                     /organism="unknown"
                     /mol_type="genomic DNA"

  Query Match             1.9%;  Score 16.8;  DB 1;  Length 21;
  Best Local Similarity   90.0%;  Pred. No. 55;
  Matches   18;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        298 AGAGAGGCATGTTGGAGACT 317
              | | ||||||||||||||||
Db          2 ATATAGGCATGTTGGAGACT 21


RESULT 41
I04212/c
LOCUS       I04212                   16 bp    DNA     linear   PAT 02-DEC-1994
DEFINITION  Sequence 8 from Patent EP 0138111.
ACCESSION   I04212
VERSION     I04212.1  GI:591829
KEYWORDS    .
SOURCE      Unknown.
  ORGANISM  Unknown.
            Unclassified.
REFERENCE   1  (bases 1 to 16)
  AUTHORS   Hallewell,R.A. and Mullenbach,G.T.
  TITLE     Superoxide dismutase cloning and expression in microorganisms
  JOURNAL   Patent: EP 0138111-A1 8 24-APR-1985;
FEATURES             Location/Qualifiers
     source          1. .16
                     /organism="unknown"
                     /mol_type="unassigned DNA"

  Query Match             1.8%;  Score 16;  DB 1;  Length 16;
  Best Local Similarity   100.0%;  Pred. No. 49;
  Matches   16;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        157 GGTGTGGGGAAGCATT 172
              ||||||||||||||||
Db         16 GGTGTGGGGAAGCATT 1


RESULT 42
I06877/c
LOCUS       I06877                   16 bp    DNA     linear   PAT 02-DEC-1994
DEFINITION  Sequence 8 from Patent EP 0340805.
ACCESSION   I06877
VERSION     I06877.1  GI:589854
KEYWORDS    .
SOURCE      Unknown.
  ORGANISM  Unknown.
            Unclassified.
REFERENCE   1  (bases 1 to 16)
  AUTHORS   Hallewell,R.A. and Mullenbach,G.T.
  TITLE     Superoxide dismutase and expression in microorganisms
  JOURNAL   Patent: EP 0340805-A1 8 08-NOV-1989;
FEATURES             Location/Qualifiers
     source          1. .16
                     /organism="unknown"
                     /mol_type="unassigned DNA"

  Query Match             1.8%;  Score 16;  DB 1;  Length 16;
  Best Local Similarity   100.0%;  Pred. No. 49;
  Matches   16;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        157 GGTGTGGGGAAGCATT 172
              ||||||||||||||||
Db         16 GGTGTGGGGAAGCATT 1


RESULT 43
AX081870/c
LOCUS       AX081870                 17 bp    DNA     linear   PAT 27-FEB-2001
DEFINITION  Sequence 114 from Patent WO0109183.
ACCESSION   AX081870
VERSION     AX081870.1  GI:13170677
KEYWORDS    .
SOURCE      synthetic construct
  ORGANISM  synthetic construct
            other sequences; artificial sequences.
REFERENCE   1
  AUTHORS   Brinkmann,U., Hoffmeyer,S., Eichelbaum,M. and Roots,I.
  TITLE     Polymorphisms in the human mdr-1 gene and their use in diagnostic
            and therapeutic applications
  JOURNAL   Patent: WO 0109183-A 114 08-FEB-2001;
            EPIDAUROS AG Biotechnologie Aktiengesellschaft (DE)
FEATURES             Location/Qualifiers
     source          1. .17
                     /organism="synthetic construct"
                     /mol_type="unassigned DNA"
                     /db_xref="taxon:32630"
                     /note="synthetic"

  Query Match             1.8%;  Score 16;  DB 1;  Length 17;
  Best Local Similarity   100.0%;  Pred. No. 52;
  Matches   16;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        321 GCAATGTGACTGCTGA 336
              ||||||||||||||||
Db         16 GCAATGTGACTGCTGA 1


RESULT 44
AX737712
LOCUS       AX737712                 17 bp    DNA     linear   PAT 08-MAY-2003
DEFINITION  Sequence 3302 from Patent WO03025177.
ACCESSION   AX737712
VERSION     AX737712.1  GI:30517000
KEYWORDS    .
SOURCE      Homo sapiens (human)
  ORGANISM  Homo sapiens
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE   1
  AUTHORS   Telerman,A., Amson,R. and Tuijnder,M.
  TITLE     Sequences involved in phenomena of tumour suppression, tumour
            reversion, apoptosis and/or resistance to viruses and the use
            thereof as medicaments
  JOURNAL   Patent: WO 03025177-A 3302 27-MAR-2003;
            Molecular Engines Laboratories (FR)
FEATURES             Location/Qualifiers
     source          1. .17
                     /organism="Homo sapiens"
                     /mol_type="unassigned DNA"
                     /db_xref="taxon:9606"

  Query Match             1.8%;  Score 16;  DB 1;  Length 17;
  Best Local Similarity   100.0%;  Pred. No. 52;
  Matches   16;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        690 GATCACTTGGAAGATT 705
              ||||||||||||||||
Db          1 GATCACTTGGAAGATT 16


RESULT 45
AX737721
LOCUS       AX737721                 17 bp    DNA     linear   PAT 08-MAY-2003
DEFINITION  Sequence 3311 from Patent WO03025177.
ACCESSION   AX737721
VERSION     AX737721.1  GI:30517009
KEYWORDS    .
SOURCE      Homo sapiens (human)
  ORGANISM  Homo sapiens
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
```

```
REFERENCE   1
  AUTHORS   Telerman,A., Amson,R. and Tuijnder,M.
  TITLE     Sequences involved in phenomena of tumour suppression, tumour
            reversion, apoptosis and/or resistance to viruses and the use
            thereof as medicaments
  JOURNAL   Patent: WO 03025177-A 3311 27-MAR-2003;
            Molecular Engines Laboratories (FR)
FEATURES             Location/Qualifiers
     source          1. .17
                     /organism="Homo sapiens"
                     /mol_type="unassigned DNA"
                     /db_xref="taxon:9606"

  Query Match             1.8%;  Score 16;  DB 1;  Length 17;
  Best Local Similarity   100.0%;  Pred. No. 52;
  Matches   16;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        517 GATCGCCCAATAAACA 532
              ||||||||||||||||
Db          1 GATCGCCCAATAAACA 16


RESULT 46
AX378471/c
LOCUS       AX378471                 18 bp    DNA     linear   PAT 18-MAR-2002
DEFINITION  Sequence 260 from Patent WO0206525.
ACCESSION   AX378471
VERSION     AX378471.1  GI:19574324
KEYWORDS    .
SOURCE      Homo sapiens (human)
  ORGANISM  Homo sapiens
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE   1
  AUTHORS   Cohen,D., Blumenfeld,M., Chumakov,I., Abderrahim,H. and Bihain,B.
  TITLE     Obesity associated biallelic marker maps
  JOURNAL   Patent: WO 0206525-A 260 24-JAN-2002;
            GENSET (FR)
FEATURES             Location/Qualifiers
     source          1. .18
                     /organism="Homo sapiens"
                     /mol_type="unassigned DNA"
                     /db_xref="taxon:9606"
     primer_bind     1. .18
                     /note="upstream amplification primer 99-32162 for SEQ 89"

  Query Match             1.8%;  Score 16;  DB 1;  Length 18;
  Best Local Similarity   100.0%;  Pred. No. 55;
  Matches   16;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        153 TGAAGGTGTGGGGAAG 168
              ||||||||||||||||
Db         16 TGAAGGTGTGGGGAAG 1


RESULT 47
AR225282
LOCUS       AR225282                 19 bp    DNA     linear   PAT 26-SEP-2002
DEFINITION  Sequence 27 from patent US 6441273.
ACCESSION   AR225282
VERSION     AR225282.1  GI:23334504
KEYWORDS    .
SOURCE      Unknown.
  ORGANISM  Unknown.
            Unclassified.
REFERENCE   1  (bases 1 to 19)
  AUTHORS   Aldwinckle,H.S. and Gaitan,A.L.
  TITLE     Constitutive and inducible promoters from coffee plants
  JOURNAL   Patent: US 6441273-A 27 27-AUG-2002;
FEATURES             Location/Qualifiers
     source          1. .19
                     /organism="unknown"
                     /mol_type="genomic DNA"

  Query Match             1.8%;  Score 16;  DB 1;  Length 19;
  Best Local Similarity   88.9%;  Pred. No. 58;
  Matches   16;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        195 ATGGATTCCATGTTCATG 212
              |||| |||||||| ||||
Db          1 ATGGNTTCCATGTNCATG 18


RESULT 48
AX706659
LOCUS       AX706659                 17 bp    DNA     linear   PAT 04-APR-2003
DEFINITION  Sequence 356 from Patent WO03013534.
ACCESSION   AX706659
VERSION     AX706659.1  GI:29563082
KEYWORDS    .
SOURCE      Homo sapiens (human)
  ORGANISM  Homo sapiens
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE   1
  AUTHORS   Heinrich,G. and Kerb,R.
  TITLE     Methods for the treatment of cancer with irinotecan based on CYP3A5
  JOURNAL   Patent: WO 03013534-A 356 20-FEB-2003;
            Epidauros Biotechnologie AG (DE)
FEATURES             Location/Qualifiers
     source          1. .17
                     /organism="Homo sapiens"
                     /mol_type="unassigned DNA"
                     /db_xref="taxon:9606"
     misc_feature    9
                     /note="r=a or g"

  Query Match             1.8%;  Score 15.6;  DB 1;  Length 17;
  Best Local Similarity   93.8%;  Pred. No. 56;
  Matches   15;  Conservative    1;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        321 GCAATGTGACTGCTGA 336
              |||||||:||||||||
Db          2 GCAATGTRACTGCTGA 17


RESULT 49
AX707589
LOCUS       AX707589                 17 bp    DNA     linear   PAT 04-APR-2003
DEFINITION  Sequence 356 from Patent WO03013536.
ACCESSION   AX707589
VERSION     AX707589.1  GI:29563762
KEYWORDS    .
SOURCE      Homo sapiens (human)
  ORGANISM  Homo sapiens
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE   1
  AUTHORS   Heinrich,G. and Kerb,R.
  TITLE     Methods for treatment of cancer using irinotecan based on UGT1A1
  JOURNAL   Patent: WO 03013536-A 356 20-FEB-2003;
            Epidauros Biotechnologie AG (DE)
FEATURES             Location/Qualifiers
     source          1. .17
                     /organism="Homo sapiens"
                     /mol_type="unassigned DNA"
                     /db_xref="taxon:9606"
     misc_feature    9
                     /note="r=a or g"

  Query Match             1.8%;  Score 15.6;  DB 1;  Length 17;
  Best Local Similarity   93.8%;  Pred. No. 56;
  Matches   15;  Conservative    1;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        321 GCAATGTGACTGCTGA 336
              |||||||:||||||||
```

```
Db          2 GCAATGTRACTGCTGA 17


RESULT 50
BD255580/c
LOCUS       BD255580                 17 bp    DNA     linear   PAT 17-JUL-2003
DEFINITION  Regulation of repressor genes using nucleic acid molecules.
ACCESSION   BD255580
VERSION     BD255580.1  GI:33065350
KEYWORDS    JP 2002541795-A/3373.
SOURCE      unidentified
  ORGANISM  unidentified
            unclassified.
REFERENCE   1  (bases 1 to 17)
  AUTHORS   Blatt,L., Zwick,M., Pavco,P. and Mcswiggen,J.
  TITLE     Regulation of repressor genes using nucleic acid molecules
  JOURNAL   Patent: JP 2002541795-A 3373 10-DEC-2002;
            RIBOZYME PHARMACEUTICALS INC
COMMENT     OS   Eukaryote
            PN   JP 2002541795-A/3373
            PD   10-DEC-2002
            PF   11-APR-2000 JP 2000611654
            PR   12-APR-1999 US    60/129390
            PI   LAWRENCE BLATT,MICHAEL ZWICK,PAMELA PAVCO,JAMES MCSWIGGEN PC
            C12N15/09,A61K38/00,A61K48/00,A61P43/00,A61P43/00,C12N5/10, PC
            C12P21/02,
            PC
            C12P21/02,C12P21/02//A61K31/711,(C12N5/10,C12R1:91),(C12P21/02, PC
             C12R1:91),
            PC   (C12P21/02,C12R1:91),(C12P21/02,C12R1:91),C12N15/00,C12N5/00,
            PC   A61K37/02,
            PC   (C12N5/00,C12R1:91)
            CC   Regulation of repressor genes using nucleic acid molecules FH
             Key             Location/Qualifiers
            FT   source          1. .17
            FT                   /organism='Eukaryote'.
FEATURES             Location/Qualifiers
     source          1. .17
                     /organism="unidentified"
                     /mol_type="genomic DNA"
                     /db_xref="taxon:32644"

  Query Match             1.8%;  Score 15.4;  DB 1;  Length 17;
  Best Local Similarity   94.1%;  Pred. No. 59;
  Matches   16;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        459 ATGAAGAAAGTACAAAG 475
              ||||||||| |||||||
Db         17 ATGAAGAAAATACAAAG 1


RESULT 51
BD255581/c
LOCUS       BD255581                 17 bp    DNA     linear   PAT 17-JUL-2003
DEFINITION  Regulation of repressor genes using nucleic acid molecules.
ACCESSION   BD255581
VERSION     BD255581.1  GI:33065351
KEYWORDS    JP 2002541795-A/3374.
SOURCE      unidentified
  ORGANISM  unidentified
            unclassified.
REFERENCE   1  (bases 1 to 17)
  AUTHORS   Blatt,L., Zwick,M., Pavco,P. and Mcswiggen,J.
  TITLE     Regulation of repressor genes using nucleic acid molecules
  JOURNAL   Patent: JP 2002541795-A 3374 10-DEC-2002;
            RIBOZYME PHARMACEUTICALS INC
COMMENT     OS   Eukaryote
            PN   JP 2002541795-A/3374
            PD   10-DEC-2002
            PF   11-APR-2000 JP 2000611654
            PR   12-APR-1999 US    60/129390
            PI   LAWRENCE BLATT,MICHAEL ZWICK,PAMELA PAVCO,JAMES MCSWIGGEN PC
            C12N15/09,A61K38/00,A61K48/00,A61P43/00,A61P43/00,C12N5/10, PC
            C12P21/02,
            PC
            C12P21/02,C12P21/02//A61K31/711,(C12N5/10,C12R1:91),(C12P21/02, PC
             C12R1:91),
            PC   (C12P21/02,C12R1:91),(C12P21/02,C12R1:91),C12N15/00,C12N5/00,
            PC   A61K37/02,
            PC   (C12N5/00,C12R1:91)
            CC   Regulation of repressor genes using nucleic acid molecules FH
             Key             Location/Qualifiers
            FT   source          1. .17
            FT                   /organism='Eukaryote'.
FEATURES             Location/Qualifiers
     source          1. .17
                     /organism="unidentified"
                     /mol_type="genomic DNA"
                     /db_xref="taxon:32644"

  Query Match             1.8%;  Score 15.4;  DB 1;  Length 17;
  Best Local Similarity   94.1%;  Pred. No. 59;
  Matches   16;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        458 AATGAAGAAAGTACAAA 474
              ||||||||| ||||||
Db         17 AATGAAGAAAATACAAA 1


RESULT 52
I06872/c
LOCUS       I06872                   17 bp    DNA     linear   PAT 02-DEC-1994
DEFINITION  Sequence 3 from Patent EP 0340805.
ACCESSION   I06872
VERSION     I06872.1  GI:589849
KEYWORDS    .
SOURCE      Unknown.
  ORGANISM  Unknown.
            Unclassified.
REFERENCE   1  (bases 1 to 17)
  AUTHORS   Hallewell,R.A. and Mullenbach,G.T.
  TITLE     Superoxide dismutase and expression in microorganisms
  JOURNAL   Patent: EP 0340805-A1 3 08-NOV-1989;
FEATURES             Location/Qualifiers
     source          1. .17
                     /organism="unknown"
                     /mol_type="unassigned DNA"

  Query Match             1.8%;  Score 15.4;  DB 1;  Length 17;
  Best Local Similarity   94.1%;  Pred. No. 59;
  Matches   16;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        122 AATTTCGAGCAGAAGGA 138
              || ||||||||||||||
Db         17 AACTTCGAGCAGAAGGA 1


RESULT 53
CQ821402
LOCUS       CQ821402                 15 bp    DNA     linear   PAT 14-JUN-2004
DEFINITION  Sequence 8 from Patent WO2004038019.
ACCESSION   CQ821402
VERSION     CQ821402.1  GI:48716051
KEYWORDS    .
SOURCE      Homo sapiens (human)
  ORGANISM  Homo sapiens
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE   1
  AUTHORS   Beeson,D., Wood,M. and Abdelgany,A.
  TITLE     Dnazyme cleaving mutant polynucleotides
  JOURNAL   Patent: WO 2004038019-A 8 06-MAY-2004;
            ISIS INNOVATION LIMITED (GB)
FEATURES             Location/Qualifiers
     source          1. .15
                     /organism="Homo sapiens"
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                     /mol_type="unassigned DNA"
                     /db_xref="taxon:9606"

  Query Match             1.7%;  Score 15;  DB 1;  Length 15;
  Best Local Similarity   100.0%;  Pred. No. 56;
  Matches   15;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy         95 GGCGACGGCCCAGTG 109
               ||||||||||||||
Db          1 GGCGACGGCCCAGTG 15


RESULT 54
CQ821408
LOCUS       CQ821408                  15 bp    DNA     linear   PAT 14-JUN-2004
DEFINITION  Sequence 14 from Patent WO2004038019.
ACCESSION   CQ821408
VERSION     CQ821408.1  GI:48716057
KEYWORDS    .
SOURCE      Homo sapiens (human)
  ORGANISM  Homo sapiens
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE   1
  AUTHORS   Beeson,D., Wood,M. and Abdelgany,A.
  TITLE     Dnazyme cleaving mutant polynucleotides
  JOURNAL   Patent: WO 2004038019-A 14 06-MAY-2004;
            ISIS INNOVATION LIMITED (GB)
FEATURES             Location/Qualifiers
     source          1. .15
                     /organism="Homo sapiens"
                     /mol_type="unassigned DNA"
                     /db_xref="taxon:9606"

  Query Match             1.7%;  Score 15;  DB 1;  Length 15;
  Best Local Similarity   100.0%;  Pred. No. 56;
  Matches   15;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        437 GATGACTTGGGCAAA 451
              ||||||||||||||
Db          1 GATGACTTGGGCAAA 15


RESULT 55
AX081871/c
LOCUS       AX081871                  17 bp    DNA     linear   PAT 27-FEB-2001
DEFINITION  Sequence 115 from Patent WO0109183.
ACCESSION   AX081871
VERSION     AX081871.1  GI:13170678
KEYWORDS    .
SOURCE      synthetic construct
  ORGANISM  synthetic construct
            other sequences; artificial sequences.
REFERENCE   1
  AUTHORS   Brinkmann,U., Hoffmeyer,S., Eichelbaum,M. and Roots,I.
  TITLE     Polymorphisms in the human mdr-1 gene and their use in diagnostic
            and therapeutic applications
  JOURNAL   Patent: WO 0109183-A 115 08-FEB-2001;
            EPIDAUROS AG Biotechnologie Aktiengesellschaft (DE)
FEATURES             Location/Qualifiers
     source          1. .17
                     /organism="synthetic construct"
                     /mol_type="unassigned DNA"
                     /db_xref="taxon:32630"
                     /note="y=c or t"

  Query Match             1.7%;  Score 15;  DB 1;  Length 17;
  Best Local Similarity   88.2%;  Pred. No. 64;
  Matches   15;  Conservative    1;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        319 GGGCAATGTGACTGCTG 335
              | |||||||:|||||||
Db         17 GTGCAATGTRACTGCTG 1


RESULT 56
AX706658/c
LOCUS       AX706658                  17 bp    DNA     linear   PAT 04-APR-2003
DEFINITION  Sequence 355 from Patent WO03013534.
ACCESSION   AX706658
VERSION     AX706658.1  GI:29563081
KEYWORDS    .
SOURCE      Homo sapiens (human)
  ORGANISM  Homo sapiens
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE   1
  AUTHORS   Heinrich,G. and Kerb,R.
  TITLE     Methods for the treatment of cancer with irinotecan based on CYP3A5
  JOURNAL   Patent: WO 03013534-A 355 20-FEB-2003;
            Epidauros Biotechnologie AG (DE)
FEATURES             Location/Qualifiers
     source          1. .17
                     /organism="Homo sapiens"
                     /mol_type="unassigned DNA"
                     /db_xref="taxon:9606"
     misc_feature    8
                     /note="y=c or t"

  Query Match             1.7%;  Score 15;  DB 1;  Length 17;
  Best Local Similarity   88.2%;  Pred. No. 64;
  Matches   15;  Conservative    1;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        319 GGGCAATGTGACTGCTG 335
              | |||||||:|||||||
Db         17 GTGCAATGTRACTGCTG 1


RESULT 57
AX707588/c
LOCUS       AX707588                  17 bp    DNA     linear   PAT 04-APR-2003
DEFINITION  Sequence 355 from Patent WO03013536.
ACCESSION   AX707588
VERSION     AX707588.1  GI:29563761
KEYWORDS    .
SOURCE      Homo sapiens (human)
  ORGANISM  Homo sapiens
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE   1
  AUTHORS   Heinrich,G. and Kerb,R.
  TITLE     Methods for treatment of cancer using irinotecan based on UGT1A1
  JOURNAL   Patent: WO 03013536-A 355 20-FEB-2003;
            Epidauros Biotechnologie AG (DE)
FEATURES             Location/Qualifiers
     source          1. .17
                     /organism="Homo sapiens"
                     /mol_type="unassigned DNA"
                     /db_xref="taxon:9606"
     misc_feature    8
                     /note="y=c or t"

  Query Match             1.7%;  Score 15;  DB 1;  Length 17;
  Best Local Similarity   88.2%;  Pred. No. 64;
  Matches   15;  Conservative    1;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        319 GGGCAATGTGACTGCTG 335
              | |||||||:|||||||
Db         17 GTGCAATGTRACTGCTG 1


RESULT 58
AX732679
LOCUS       AX732679                  17 bp    DNA     linear   PAT 08-MAY-2003
DEFINITION  Sequence 4313 from Patent WO03025175.
ACCESSION   AX732679
```

```
VERSION     AX732679.1  GI:30512022
KEYWORDS    .
SOURCE      Homo sapiens (human)
  ORGANISM  Homo sapiens
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE   1
  AUTHORS   Telerman,A., Amson,R. and Tuijnder,M.
  TITLE     Sequences involved in phenomena of tumour suppression, tumour
            reversion, apoptosis and/or virus resistance and their use as
            medicines
  JOURNAL   Patent: WO 03025175-A 4313 27-MAR-2003;
            Molecular Engines Laboratories (FR).
FEATURES             Location/Qualifiers
     source          1. .17
                     /organism="Homo sapiens"
                     /mol_type="unassigned DNA"
                     /db_xref="taxon:9606"

  Query Match             1.7%;  Score 15;  DB 1;  Length 17;
  Best Local Similarity   100.0%;  Pred. No. 64;
  Matches   15;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        811 TCAAGCCTGTGAATA 825
              |||||||||||||||
Db          3 TCAAGCCTGTGAATA 17


RESULT 59
A16196/c
LOCUS       A16196                    17 bp    DNA     linear   PAT 14-JUN-1994
DEFINITION  Oligonucleotide primer pair 2, second.
ACCESSION   A16196
VERSION     A16196.1  GI:583046
KEYWORDS    .
SOURCE      synthetic construct
  ORGANISM  synthetic construct
            other sequences; artificial sequences.
REFERENCE   1  (bases 1 to 17)
  AUTHORS   Rossau,Rudi. and Van Heuverswijn,Hugo.
  TITLE     Hybridization probes derived from the spacer region between the 16S
            and 23S rRNA genes for the detection of non-viral microorganisms
  JOURNAL   Patent: EP 0452596-A 4 23-OCT-1991;
            N.V. INNOGENETICS S.A
FEATURES             Location/Qualifiers
     source          1. .17
                     /organism="synthetic construct"
                     /mol_type="unassigned DNA"
                     /db_xref="taxon:32630"

  Query Match             1.6%;  Score 14.4;  DB 1;  Length 17;
  Best Local Similarity   93.8%;  Pred. No. 72;
  Matches   15;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy         67 GGCGACGAAGGCCGTG 82
              |||||||||| ||||
Db         16 GGCGACGAAGGACGTG 1


RESULT 60
A16242/c
LOCUS       A16242                    17 bp    DNA     linear   PAT 14-JUN-1994
DEFINITION  Oligonucleotide primer AP23.
ACCESSION   A16242
VERSION     A16242.1  GI:583092
KEYWORDS    .
SOURCE      synthetic construct
  ORGANISM  synthetic construct
            other sequences; artificial sequences.
REFERENCE   1  (bases 1 to 17)
  AUTHORS   Rossau,Rudi. and Van Heuverswijn,Hugo.
  TITLE     Hybridization probes derived from the spacer region between the 16S
            and 23S rRNA genes for the detection of non-viral microorganisms
  JOURNAL   Patent: EP 0452596-A 50 23-OCT-1991;
            N.V. INNOGENETICS S.A
FEATURES             Location/Qualifiers
     source          1. .17
                     /organism="synthetic construct"
                     /mol_type="unassigned DNA"
                     /db_xref="taxon:32630"

  Query Match             1.6%;  Score 14.4;  DB 1;  Length 17;
  Best Local Similarity   93.8%;  Pred. No. 72;
  Matches   15;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy         67 GGCGACGAAGGCCGTG 82
              |||||||||| ||||
Db         16 GGCGACGAAGGACGTG 1


RESULT 61
BD203207/c
LOCUS       BD203207                  17 bp    RNA     linear   PAT 17-JUL-2003
DEFINITION  Method and reagent for treating diseases or conditions concerning
            molecule participating in vasculogenic response.
ACCESSION   BD203207
VERSION     BD203207.1  GI:33012977
KEYWORDS    JP 2002509721-A/6233.
SOURCE      Homo sapiens (human)
  ORGANISM  Homo sapiens
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE   1  (bases 1 to 17)
  AUTHORS   Pavco,P.A., Roberts,E., Jarvis,T., Coeshott,C. and Mcswiggen,J.A.
  TITLE     Method and reagent for treating diseases or conditions concerning
            molecule participating in vasculogenic response
  JOURNAL   Patent: JP 2002509721-A 6233 02-APR-2002;
            RIBOZYME PHARMACEUTICALS INC
COMMENT     OS   Homo sapiens (human)
            PN   JP 2002509721-A/6233
            PD   02-APR-2002
            PF   24-MAR-1999 JP 2000541291
            PR   27-MAR-1998 US    60/079678
            PI   PAMELA A PAVCO,ELISABETH ROBERTS,THALE JARVIS,CLAIRE COESHOTT,
            PI   JAMES A MCSWIGGEN
            PC
            C12N15/09,A61K31/7088,A61K31/7125,A61K48/00,A61P3/10,A61P17/06, PC
             A61P29/00,
            PC   A61P35/00,A61P43/00,C12N5/10,C12N9/00//A61K35/76,C12N15/00, PC
              C12N5/00
            CC   Method and reagent for treating diseases or conditions  CC
                   concerning molecule
            CC   participating in vasculogenic response
            FH   Key             Location/Qualifiers
            FT   source          1. .17
            FT                   /organism='Homo sapiens (human)'.
FEATURES             Location/Qualifiers
     source          1. .17 .
                     /organism="Homo sapiens"
                     /mol_type="genomic RNA"
                     /db_xref="taxon:9606"

  Query Match             1.6%;  Score 14.4;  DB 1;  Length 17;
  Best Local Similarity   93.8%;  Pred. No. 72;
  Matches   15;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        676 AGAAACTGATTTATGA 691
              |||||||||||| |||
Db         16 AGAAACTGATTTGTGA 1


RESULT 62
BD255579/c
LOCUS       BD255579                  17 bp    DNA     linear   PAT 17-JUL-2003
DEFINITION  Regulation of repressor genes using nucleic acid molecules.
ACCESSION   BD255579
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```
VERSION     BD255579.1  GI:33065349
KEYWORDS    JP 2002541795-A/3372.
SOURCE      unidentified
  ORGANISM  unidentified
            unclassified.
REFERENCE   1  (bases 1 to 17)
  AUTHORS   Blatt,L., Zwick,M., Pavco,P. and Mcswiggen,J.
  TITLE     Regulation of repressor genes using nucleic acid molecules
  JOURNAL   Patent: JP 2002541795-A 3372 10-DEC-2002;
            RIBOZYME PHARMACEUTICALS INC
COMMENT     OS   Eukaryote
            PN   JP 2002541795-A/3372
            PD   10-DEC-2002
            PF   11-APR-2000 JP 2000611654
            PR   12-APR-1999 US    60/129390
            PI   LAWRENCE BLATT,MICHAEL ZWICK,PAMELA PAVCO,JAMES MCSWIGGEN PC
            C12N15/09,A61K38/00,A61K48/00,A61P43/00,A61P43/00,C12N5/10, PC
            C12P21/02,
            PC
            C12P21/02,C12P21/02//A61K31/711,(C12N5/10,C12R1:91),(C12P21/02, PC
             C12R1:91),
            PC   (C12P21/02,C12R1:91),(C12P21/02,C12R1:91),C12N15/00,C12N5/00,
            PC   A61K37/02,
            PC   (C12N5/00,C12R1:91)
            CC   Regulation of repressor genes using nucleic acid molecules FH
             Key             Location/Qualifiers
            FT   source          1. .17
            FT                   /organism='Eukaryote'.
FEATURES             Location/Qualifiers
     source          1. .17
                     /organism="unidentified"
                     /mol_type="genomic DNA"
                     /db_xref="taxon:32644"

  Query Match             1.6%;  Score 14.4;  DB 1;  Length 17;
  Best Local Similarity   93.8%;  Pred. No. 72;
  Matches   15;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        461 GAAGAAAGTACAAAGA 476
              ||||||| ||||||||
Db         17 GAAGAAAATACAAAGA 2


RESULT 63
BD255582/c
LOCUS       BD255582                  17 bp    DNA     linear   PAT 17-JUL-2003
DEFINITION  Regulation of repressor genes using nucleic acid molecules.
ACCESSION   BD255582
VERSION     BD255582.1  GI:33065352
KEYWORDS    JP 2002541795-A/3375.
SOURCE      unidentified
  ORGANISM  unidentified
            unclassified.
REFERENCE   1  (bases 1 to 17)
  AUTHORS   Blatt,L., Zwick,M., Pavco,P. and Mcswiggen,J.
  TITLE     Regulation of repressor genes using nucleic acid molecules
  JOURNAL   Patent: JP 2002541795-A 3375 10-DEC-2002;
            RIBOZYME PHARMACEUTICALS INC
COMMENT     OS   Eukaryote
            PN   JP 2002541795-A/3375
            PD   10-DEC-2002
            PF   11-APR-2000 JP 2000611654
            PR   12-APR-1999 US    60/129390
            PI   LAWRENCE BLATT,MICHAEL ZWICK,PAMELA PAVCO,JAMES MCSWIGGEN PC
            C12N15/09,A61K38/00,A61K48/00,A61P43/00,A61P43/00,C12N5/10, PC
            C12P21/02,
            PC
            C12P21/02,C12P21/02//A61K31/711,(C12N5/10,C12R1:91),(C12P21/02, PC
             C12R1:91),
            PC   (C12P21/02,C12R1:91),(C12P21/02,C12R1:91),C12N15/00,C12N5/00,
            PC   A61K37/02,
            PC   (C12N5/00,C12R1:91)
            CC   Regulation of repressor genes using nucleic acid molecules FH
             Key             Location/Qualifiers
            FT   source          1. .17
            FT                   /organism='Eukaryote'.
FEATURES             Location/Qualifiers
     source          1. .17
                     /organism="unidentified"
                     /mol_type="genomic DNA"
                     /db_xref="taxon:32644"

  Query Match             1.6%;  Score 14.4;  DB 1;  Length 17;
  Best Local Similarity   93.8%;  Pred. No. 72;
  Matches   15;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        458 AATGAAGAAAGTACAA 473
              |||||||||| |||||
Db         16 AATGAAGAAAATACAA 1


RESULT 64
BD257636
LOCUS       BD257636                  17 bp    DNA     linear   PAT 17-JUL-2003
DEFINITION  Regulation of repressor genes using nucleic acid molecules.
ACCESSION   BD257636
VERSION     BD257636.1  GI:33067406
KEYWORDS    JP 2002541795-A/5429.
SOURCE      unidentified
  ORGANISM  unidentified
            unclassified.
REFERENCE   1  (bases 1 to 17)
  AUTHORS   Blatt,L., Zwick,M., Pavco,P. and Mcswiggen,J.
  TITLE     Regulation of repressor genes using nucleic acid molecules
  JOURNAL   Patent: JP 2002541795-A 5429 10-DEC-2002;
            RIBOZYME PHARMACEUTICALS INC
COMMENT     OS   Eukaryote
            PN   JP 2002541795-A/5429
            PD   10-DEC-2002
            PF   11-APR-2000 JP 2000611654
            PR   12-APR-1999 US    60/129390
            PI   LAWRENCE BLATT,MICHAEL ZWICK,PAMELA PAVCO,JAMES MCSWIGGEN PC
            C12N15/09,A61K38/00,A61K48/00,A61P43/00,A61P43/00,C12N5/10, PC
            C12P21/02,
            PC
            C12P21/02,C12P21/02//A61K31/711,(C12N5/10,C12R1:91),(C12P21/02, PC
             C12R1:91),
            PC   (C12P21/02,C12R1:91),(C12P21/02,C12R1:91),C12N15/00,C12N5/00,
            PC   A61K37/02,
            PC   (C12N5/00,C12R1:91)
            CC   Regulation of repressor genes using nucleic acid molecules FH
             Key             Location/Qualifiers
            FT   source          1. .17
            FT                   /organism='Eukaryote'.
FEATURES             Location/Qualifiers
     source          1. .17
                     /organism="unidentified"
                     /mol_type="genomic DNA"
                     /db_xref="taxon:32644"

  Query Match             1.6%;  Score 14.4;  DB 1;  Length 17;
  Best Local Similarity   93.8%;  Pred. No. 72;
  Matches   15;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        135 AGGAAAGTAATGGACC 150
              |||||| |||||||||
Db          1 AGGAAACTAATGGACC 16


RESULT 65
I23680/c
LOCUS       I23680                    17 bp    DNA     linear   PAT 07-OCT-1996
DEFINITION  Sequence 102 from patent US 5536638.
ACCESSION   I23680
VERSION     I23680.1  GI:1603550
KEYWORDS    .
```

```
SOURCE      Unknown.
  ORGANISM  Unknown.
            Unclassified.
REFERENCE   1  (bases 1 to 17)
  AUTHORS   Rossau,R. and Van Heuverswyn,H.
  TITLE     Hybridization probes derived from the spacer region between the 16S
            and 23S rRNA genes for the detection of Neisseria gonorrhoeae
  JOURNAL   Patent: US 5536638-A 102 16-JUL-1996;
FEATURES             Location/Qualifiers
     source          1. .17
                     /organism="unknown"
                     /mol_type="unassigned DNA"

  Query Match             1.6%;  Score 14.4;  DB 1;  Length 17;
  Best Local Similarity   93.8%;  Pred. No. 72;
  Matches   15;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy         67 GGCGACGAAGGCCGTG 82
              ||||||||||| ||||
Db         16 GGCGACGAAGGACGTG 1


RESULT 66
I23682/c
LOCUS       I23682                    17 bp    DNA     linear   PAT 07-OCT-1996
DEFINITION  Sequence 104 from patent US 5536638.
ACCESSION   I23682
VERSION     I23682.1  GI:1603552
KEYWORDS    .
SOURCE      Unknown.
  ORGANISM  Unknown.
            Unclassified.
REFERENCE   1  (bases 1 to 17)
  AUTHORS   Rossau,R. and Van Heuverswyn,H.
  TITLE     Hybridization probes derived from the spacer region between the 16S
            and 23S rRNA genes for the detection of Neisseria gonorrhoeae
  JOURNAL   Patent: US 5536638-A 104 16-JUL-1996;
FEATURES             Location/Qualifiers
     source          1. .17
                     /organism="unknown"
                     /mol_type="unassigned DNA"

  Query Match             1.6%;  Score 14.4;  DB 1;  Length 17;
  Best Local Similarity   93.8%;  Pred. No. 72;
  Matches   15;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy         67 GGCGACGAAGGCCGTG 82
              ||||||||||| ||||
Db         16 GGCGACGAAGGACGTG 1


RESULT 67
AR433547/c
LOCUS       AR433547                  17 bp    DNA     linear   PAT 18-DEC-2003
DEFINITION  Sequence 102 from patent US 6656689.
ACCESSION   AR433547
VERSION     AR433547.1  GI:40196383
KEYWORDS    .
SOURCE      Unknown.
  ORGANISM  Unknown.
            Unclassified.
REFERENCE   1  (bases 1 to 17)
  AUTHORS   Rossau,R. and Van Heuverswyn,H.
  TITLE     Hybridization probes derived from the spacer region between the 16S
            and 23S rRNA genes for the detection of non-viral microorganisms
  JOURNAL   Patent: US 6656689-A 102 02-DEC-2003;
FEATURES             Location/Qualifiers
     source          1. .17
                     /organism="unknown"
                     /mol_type="genomic DNA"

  Query Match             1.6%;  Score 14.4;  DB 1;  Length 17;
  Best Local Similarity   93.8%;  Pred. No. 72;
  Matches   15;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy         67 GGCGACGAAGGCCGTG 82
              ||||||||||| ||||
Db         16 GGCGACGAAGGACGTG 1


RESULT 68
AR433549/c
LOCUS       AR433549                  17 bp    DNA     linear   PAT 18-DEC-2003
DEFINITION  Sequence 104 from patent US 6656689.
ACCESSION   AR433549
VERSION     AR433549.1  GI:40196385
KEYWORDS    .
SOURCE      Unknown.
  ORGANISM  Unknown.
            Unclassified.
REFERENCE   1  (bases 1 to 17)
  AUTHORS   Rossau,R. and Van Heuverswyn,H.
  TITLE     Hybridization probes derived from the spacer region between the 16S
            and 23S rRNA genes for the detection of non-viral microorganisms
  JOURNAL   Patent: US 6656689-A 104 02-DEC-2003;
FEATURES             Location/Qualifiers
     source          1. .17
                     /organism="unknown"
                     /mol_type="genomic DNA"

  Query Match             1.6%;  Score 14.4;  DB 1;  Length 17;
  Best Local Similarity   93.8%;  Pred. No. 72;
  Matches   15;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy         67 GGCGACGAAGGCCGTG 82
              ||||||||||| ||||
Db         16 GGCGACGAAGGACGTG 1


RESULT 69
AX216792/c
LOCUS       AX216792                  17 bp    RNA     linear   PAT 07-SEP-2001
DEFINITION  Sequence 2234 from Patent WO0159103.
ACCESSION   AX216792
VERSION     AX216792.1  GI:15526853
KEYWORDS    .
SOURCE      synthetic construct
  ORGANISM  synthetic construct
            other sequences; artificial sequences.
REFERENCE   1
  AUTHORS   Blatt,L., Mcswiggen,J. and Chowrira,B.M.
  TITLE     Method and reagent for the modulation and diagnosis of cd20 and
            nogo gene expression
  JOURNAL   Patent: WO 0159103-A 2234 16-AUG-2001;
            RIBOZYME PHARMACEUTICALS, INC. (US) ; Blatt, Lawrence (US) ;
            McSwiggen, James (US) ; Chowrira, Bharat M. (US)
FEATURES             Location/Qualifiers
     source          1. .17
                     /organism="synthetic construct"
                     /mol_type="unassigned RNA"
                     /db_xref="taxon:32630"
                     /note="Nucleic Acid"

  Query Match             1.6%;  Score 14.4;  DB 1;  Length 17;
  Best Local Similarity   93.8%;  Pred. No. 72;
  Matches   15;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        857 TTAAAAGAATCCAAAT 872
              |||||||| |||||||
Db         17 TTAAAAGATTCCAAAT 2


RESULT 70
AX216884
LOCUS       AX216884                  17 bp    RNA     linear   PAT 07-SEP-2001
DEFINITION  Sequence 2326 from Patent WO0159103.
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ACCESSION   AX216884
VERSION     AX216884.1  GI:15526945
KEYWORDS    .
SOURCE      synthetic construct
  ORGANISM  synthetic construct
            other sequences; artificial sequences.
REFERENCE   1
  AUTHORS   Blatt,L., Mcswiggen,J. and Chowrira,B.M.
  TITLE     Method and reagent for the modulation and diagnosis of cd20 and
            nogo gene expression
  JOURNAL   Patent: WO 0159103-A 2326 16-AUG-2001;
            RIBOZYME PHARMACEUTICALS, INC. (US) ; Blatt, Lawrence (US) ;
            McSwiggen, James (US) ; Chowrira, Bharat M. (US)
FEATURES             Location/Qualifiers
     source          1. .17
                     /organism="synthetic construct"
                     /mol_type="unassigned RNA"
                     /db_xref="taxon:32630"
                     /note="Nucleic Acid"

  Query Match             1.6%;  Score 14.4;  DB 1;  Length 17;
  Best Local Similarity   93.8%;  Pred. No. 72;
  Matches   15;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        822 AATAAAAACCCTGTAT 837
              ||||||||  |||||||
Db          1 AATAAAAAACCTGTAT 16


RESULT 71
AX701183/c
LOCUS       AX701183                  17 bp    DNA     linear   PAT 03-APR-2003
DEFINITION  Sequence 19 from Patent WO03012097.
ACCESSION   AX701183
VERSION     AX701183.1  GI:29536953
KEYWORDS    .
SOURCE      synthetic construct
  ORGANISM  synthetic construct
            other sequences; artificial sequences.
REFERENCE   1
  AUTHORS   Price,G.B. and Zannis-Hadjopoulos,M.
  TITLE     Methods of inhibiting dna replication
  JOURNAL   Patent: WO 03012097-A 19 13-FEB-2003;
            Price, Gerald B. (CA) ; Zannis-Hadjopoulos, Maria (CA)
FEATURES             Location/Qualifiers
     source          1. .17
                     /organism="synthetic construct"
                     /mol_type="unassigned DNA"
                     /db_xref="taxon:32630"
                     /note="Synthetic oligonucleotide"

  Query Match             1.6%;  Score 14.4;  DB 1;  Length 17;
  Best Local Similarity   93.8%;  Pred. No. 72;
  Matches   15;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        453 GTGGAAATGAAGAAAG 468
              |||||  ||||||||||
Db         16 GTGGAGATGAAGAAAG 1


RESULT 72
AX706656/c
LOCUS       AX706656                  17 bp    DNA     linear   PAT 04-APR-2003
DEFINITION  Sequence 353 from Patent WO03013534.
ACCESSION   AX706656
VERSION     AX706656.1  GI:29563079
KEYWORDS    .
SOURCE      Homo sapiens (human)
  ORGANISM  Homo sapiens
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE   1
  AUTHORS   Heinrich,G. and Kerb,R.
  TITLE     Methods for the treatment of cancer with irinotecan based on CYP3A5
  JOURNAL   Patent: WO 03013534-A 353 20-FEB-2003;
            Epidauros Biotechnologie AG (DE)
FEATURES             Location/Qualifiers
     source          1. .17
                     /organism="Homo sapiens"
                     /mol_type="unassigned DNA"
                     /db_xref="taxon:9606"

  Query Match             1.6%;  Score 14.4;  DB 1;  Length 17;
  Best Local Similarity   93.8%;  Pred. No. 72;
  Matches   15;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        321 GCAATGTGACTGCTGA 336
              |||||||  ||||||||
Db         16 GCAATGTAACTGCTGA 1


RESULT 73
AX706657
LOCUS       AX706657                  17 bp    DNA     linear   PAT 04-APR-2003
DEFINITION  Sequence 354 from Patent WO03013534.
ACCESSION   AX706657
VERSION     AX706657.1  GI:29563080
KEYWORDS    .
SOURCE      Homo sapiens (human)
  ORGANISM  Homo sapiens
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE   1
  AUTHORS   Heinrich,G. and Kerb,R.
  TITLE     Methods for the treatment of cancer with irinotecan based on CYP3A5
  JOURNAL   Patent: WO 03013534-A 354 20-FEB-2003;
            Epidauros Biotechnologie AG (DE)
FEATURES             Location/Qualifiers
     source          1. .17
                     /organism="Homo sapiens"
                     /mol_type="unassigned DNA"
                     /db_xref="taxon:9606"

  Query Match             1.6%;  Score 14.4;  DB 1;  Length 17;
  Best Local Similarity   93.8%;  Pred. No. 72;
  Matches   15;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        321 GCAATGTGACTGCTGA 336
              |||||||  ||||||||
Db          2 GCAATGTAACTGCTGA 17


RESULT 74
AX707586/c
LOCUS       AX707586                  17 bp    DNA     linear   PAT 04-APR-2003
DEFINITION  Sequence 353 from Patent WO03013536.
ACCESSION   AX707586
VERSION     AX707586.1  GI:29563759
KEYWORDS    .
SOURCE      Homo sapiens (human)
  ORGANISM  Homo sapiens
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE   1
  AUTHORS   Heinrich,G. and Kerb,R.
  TITLE     Methods for treatment of cancer using irinotecan based on UGT1A1
  JOURNAL   Patent: WO 03013536-A 353 20-FEB-2003;
            Epidauros Biotechnologie AG (DE)
FEATURES             Location/Qualifiers
     source          1. .17
                     /organism="Homo sapiens"
                     /mol_type="unassigned DNA"
                     /db_xref="taxon:9606"

  Query Match             1.6%;  Score 14.4;  DB 1;  Length 17;
  Best Local Similarity   93.8%;  Pred. No. 72;
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  Matches   15;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        321 GCAATGTGACTGCTGA 336
              ||||||| ||||||||
Db         16 GCAATGTAACTGCTGA 1


RESULT 75
AX707587
LOCUS       AX707587                  17 bp    DNA     linear   PAT 04-APR-2003
DEFINITION  Sequence 354 from Patent WO03013536.
ACCESSION   AX707587
VERSION     AX707587.1  GI:29563760
KEYWORDS    .
SOURCE      Homo sapiens (human)
  ORGANISM  Homo sapiens
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE   1
  AUTHORS   Heinrich,G. and Kerb,R.
  TITLE     Methods for treatment of cancer using irinotecan based on UGT1A1
  JOURNAL   Patent: WO 03013536-A 354 20-FEB-2003;
            Epidauros Biotechnologie AG (DE)
FEATURES             Location/Qualifiers
     source          1. .17
                     /organism="Homo sapiens"
                     /mol_type="unassigned DNA"
                     /db_xref="taxon:9606"

  Query Match             1.6%;  Score 14.4;  DB 1;  Length 17;
  Best Local Similarity   93.8%;  Pred. No. 72;
  Matches   15;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        321 GCAATGTGACTGCTGA 336
              ||||||| ||||||||
Db          2 GCAATGTAACTGCTGA 17


RESULT 76
AX731809
LOCUS       AX731809                  17 bp    DNA     linear   PAT 08-MAY-2003
DEFINITION  Sequence 3443 from Patent WO03025175.
ACCESSION   AX731809
VERSION     AX731809.1  GI:30511152
KEYWORDS    .
SOURCE      Homo sapiens (human)
  ORGANISM  Homo sapiens
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE   1
  AUTHORS   Telerman,A., Amson,R. and Tuijnder,M.
  TITLE     Sequences involved in phenomena of tumour suppression, tumour
            reversion, apoptosis and/or virus resistance and their use as
            medicines
  JOURNAL   Patent: WO 03025175-A 3443 27-MAR-2003;
            Molecular Engines Laboratories (FR)
FEATURES             Location/Qualifiers
     source          1. .17
                     /organism="Homo sapiens"
                     /mol_type="unassigned DNA"
                     /db_xref="taxon:9606"

  Query Match             1.6%;  Score 14.4;  DB 1;  Length 17;
  Best Local Similarity   93.8%;  Pred. No. 72;
  Matches   15;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        620 ATCTTAAAAGTGTAAT 635
              |||||||||||||  ||
Db          2 ATCTTAAAAGTGTTAT 17


RESULT 77
AX733720
LOCUS       AX733720                  17 bp    DNA     linear   PAT 08-MAY-2003
DEFINITION  Sequence 5354 from Patent WO03025175.
ACCESSION   AX733720
VERSION     AX733720.1  GI:30513063
KEYWORDS    .
SOURCE      Homo sapiens (human)
  ORGANISM  Homo sapiens
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE   1
  AUTHORS   Telerman,A., Amson,R. and Tuijnder,M.
  TITLE     Sequences involved in phenomena of tumour suppression, tumour
            reversion, apoptosis and/or virus resistance and their use as
            medicines
  JOURNAL   Patent: WO 03025175-A 5354 27-MAR-2003;
            Molecular Engines Laboratories (FR)
FEATURES             Location/Qualifiers
     source          1. .17
                     /organism="Homo sapiens"
                     /mol_type="unassigned DNA"
                     /db_xref="taxon:9606"

  Query Match             1.6%;  Score 14.4;  DB 1;  Length 17;
  Best Local Similarity   93.8%;  Pred. No. 72;
  Matches   15;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        376 GATCTCACTCTCAGGA 391
              ||||||| ||||||||
Db          1 GATCTCATTCTCAGGA 16


RESULT 78
AX735175
LOCUS       AX735175                  17 bp    DNA     linear   PAT 08-MAY-2003
DEFINITION  Sequence 765 from Patent WO03025177.
ACCESSION   AX735175
VERSION     AX735175.1  GI:30514452
KEYWORDS    .
SOURCE      Homo sapiens (human)
  ORGANISM  Homo sapiens
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE   1
  AUTHORS   Telerman,A., Amson,R. and Tuijnder,M.
  TITLE     Sequences involved in phenomena of tumour suppression, tumour
            reversion, apoptosis and/or resistance to viruses and the use
            thereof as medicaments
  JOURNAL   Patent: WO 03025177-A 765 27-MAR-2003;
            Molecular Engines Laboratories (FR)
FEATURES             Location/Qualifiers
     source          1. .17
                     /organism="Homo sapiens"
                     /mol_type="unassigned DNA"
                     /db_xref="taxon:9606"

  Query Match             1.6%;  Score 14.4;  DB 1;  Length 17;
  Best Local Similarity   93.8%;  Pred. No. 72;
  Matches   15;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        261 ATCCTCTATCCAGAAA 276
              ||||| ||||||||||
Db          2 ATCCTATATCCAGAAA 17


RESULT 79
AX761994
LOCUS       AX761994                  17 bp    DNA     linear   PAT 25-JUN-2003
DEFINITION  Sequence 5315 from Patent WO03040369.
ACCESSION   AX761994
VERSION     AX761994.1  GI:32256610
KEYWORDS    .
SOURCE      Homo sapiens (human)
  ORGANISM  Homo sapiens
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            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE   1
  AUTHORS   Telerman,A., Amson,R. and Tuijnder,M.
  TITLE     Sequences involved in tumoral suppression, tumoral reversion,
            apoptosis and/or viral resistance phenomena and their use as
            medicines
  JOURNAL   Patent: WO 03040369-A 5315 15-MAY-2003;
            Molecular Engines Laboratories (FR)
FEATURES             Location/Qualifiers
     source          1. .17
                     /organism="Homo sapiens"
                     /mol_type="unassigned DNA"
                     /db_xref="taxon:9606"

  Query Match             1.6%;  Score 14.4;  DB 1;  Length 17;
  Best Local Similarity   93.8%;  Pred. No. 72;
  Matches   15;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        620 ATCTTAAAAGTGTAAT 635
              ||||||||||||| ||
Db          2 ATCTTAAAAGTGTTAT 17


RESULT 80
CQ784352/c
LOCUS       CQ784352                 18 bp    DNA     linear   PAT 17-MAR-2004
DEFINITION  Sequence 8 from Patent WO2004016317.
ACCESSION   CQ784352
VERSION     CQ784352.1  GI:45538840
KEYWORDS    .
SOURCE      synthetic construct
  ORGANISM  synthetic construct
            other sequences; artificial sequences.
REFERENCE   1
  AUTHORS   Touw,I.P., Delwel,H.R., Lowenberg,B. and Valk,P.J.
  TITLE     Use of murine genomic regions identified to be involved in tumor
            development for the development of anti-cancer drugs and diagnosis
            of cancer
  JOURNAL   Patent: WO 2004016317-A 8 26-FEB-2004;
            Erasmus University Medical Center Rotterdam (NL)
FEATURES             Location/Qualifiers
     source          1. .18
                     /organism="synthetic construct"
                     /mol_type="unassigned DNA"
                     /db_xref="taxon:32630"
                     /note="Primer pLTR3"

  Query Match             1.6%;  Score 14.4;  DB 1;  Length 18;
  Best Local Similarity   93.8%;  Pred. No. 76;
  Matches   15;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        380 TCACTCTCAGGAGACC 395
              ||||||| ||||||||
Db         16 TCACTCTGAGGAGACC 1


RESULT 81
AR046169
LOCUS       AR046169                 17 bp    DNA     linear   PAT 29-SEP-1999
DEFINITION  Sequence 962 from patent US 5817796.
ACCESSION   AR046169
VERSION     AR046169.1  GI:5967634
KEYWORDS    .
SOURCE      Unknown.
  ORGANISM  Unknown.
            Unclassified.
REFERENCE   1  (bases 1 to 17)
  AUTHORS   Stinchcomb,D.T., Draper,K., McSwiggen,J. and Jarvis,T.
  TITLE     C-myb ribozymes having 2'-5'-linked adenylate residues
  JOURNAL   Patent: US 5817796-A 962 06-OCT-1998;
FEATURES             Location/Qualifiers
     source          1. .17
                     /organism="unknown"
                     /mol_type="unassigned DNA"

  Query Match             1.6%;  Score 14;  DB 1;  Length 17;
  Best Local Similarity   100.0%;  Pred. No. 78;
  Matches   14;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        709 ATAGTTTTATAAAA 722
              ||||||||||||||
Db          3 ATAGTTTTATAAAA 16


RESULT 82
AR046171
LOCUS       AR046171                 17 bp    DNA     linear   PAT 29-SEP-1999
DEFINITION  Sequence 964 from patent US 5817796.
ACCESSION   AR046171
VERSION     AR046171.1  GI:5967636
KEYWORDS    .
SOURCE      Unknown.
  ORGANISM  Unknown.
            Unclassified.
REFERENCE   1  (bases 1 to 17)
  AUTHORS   Stinchcomb,D.T., Draper,K., McSwiggen,J. and Jarvis,T.
  TITLE     C-myb ribozymes having 2'-5'-linked adenylate residues
  JOURNAL   Patent: US 5817796-A 964 06-OCT-1998;
FEATURES             Location/Qualifiers
     source          1. .17
                     /organism="unknown"
                     /mol_type="unassigned DNA"

  Query Match             1.6%;  Score 14;  DB 1;  Length 17;
  Best Local Similarity   100.0%;  Pred. No. 78;
  Matches   14;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        709 ATAGTTTTATAAAA 722
              ||||||||||||||
Db          2 ATAGTTTTATAAAA 15


RESULT 83
AR046173
LOCUS       AR046173                 17 bp    DNA     linear   PAT 29-SEP-1999
DEFINITION  Sequence 966 from patent US 5817796.
ACCESSION   AR046173
VERSION     AR046173.1  GI:5967638
KEYWORDS    .
SOURCE      Unknown.
  ORGANISM  Unknown.
            Unclassified.
REFERENCE   1  (bases 1 to 17)
  AUTHORS   Stinchcomb,D.T., Draper,K., McSwiggen,J. and Jarvis,T.
  TITLE     C-myb ribozymes having 2'-5'-linked adenylate residues
  JOURNAL   Patent: US 5817796-A 966 06-OCT-1998;
FEATURES             Location/Qualifiers
     source          1. .17
                     /organism="unknown"
                     /mol_type="unassigned DNA"

  Query Match             1.6%;  Score 14;  DB 1;  Length 17;
  Best Local Similarity   100.0%;  Pred. No. 78;
  Matches   14;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        709 ATAGTTTTATAAAA 722
              ||||||||||||||
Db          1 ATAGTTTTATAAAA 14


RESULT 84
I53221
LOCUS       I53221                   17 bp    DNA     linear   PAT 07-OCT-1997
DEFINITION  Sequence 962 from patent US 5646042.
ACCESSION   I53221
```

```
VERSION     I53221.1  GI:2474424
KEYWORDS    .
SOURCE      Unknown.
  ORGANISM  Unknown.
            Unclassified.
REFERENCE   1  (bases 1 to 17)
  AUTHORS   Stinchcomb,D.T., Draper,K., McSwiggen,J. and Jarvis,T.
  TITLE     C-myb targeted ribozymes
  JOURNAL   Patent: US 5646042-A 962 08-JUL-1997;
FEATURES             Location/Qualifiers
     source          1. .17
                     /organism="unknown"
                     /mol_type="unassigned DNA"

  Query Match             1.6%;  Score 14;  DB 1;  Length 17;
  Best Local Similarity   100.0%;  Pred. No. 78;
  Matches   14;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        709 ATAGTTTTATAAAA 722
              ||||||||||||||
Db          3 ATAGTTTTATAAAA 16


RESULT 85
I53223
LOCUS       I53223                   17 bp    DNA     linear   PAT 07-OCT-1997
DEFINITION  Sequence 964 from patent US 5646042.
ACCESSION   I53223
VERSION     I53223.1  GI:2474426
KEYWORDS    .
SOURCE      Unknown.
  ORGANISM  Unknown.
            Unclassified.
REFERENCE   1  (bases 1 to 17)
  AUTHORS   Stinchcomb,D.T., Draper,K., McSwiggen,J. and Jarvis,T.
  TITLE     C-myb targeted ribozymes
  JOURNAL   Patent: US 5646042-A 964 08-JUL-1997;
FEATURES             Location/Qualifiers
     source          1. .17
                     /organism="unknown"
                     /mol_type="unassigned DNA"

  Query Match             1.6%;  Score 14;  DB 1;  Length 17;
  Best Local Similarity   100.0%;  Pred. No. 78;
  Matches   14;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        709 ATAGTTTTATAAAA 722
              ||||||||||||||
Db          2 ATAGTTTTATAAAA 15


RESULT 86
I53225
LOCUS       I53225                   17 bp    DNA     linear   PAT 07-OCT-1997
DEFINITION  Sequence 966 from patent US 5646042.
ACCESSION   I53225
VERSION     I53225.1  GI:2474428
KEYWORDS    .
SOURCE      Unknown.
  ORGANISM  Unknown.
            Unclassified.
REFERENCE   1  (bases 1 to 17)
  AUTHORS   Stinchcomb,D.T., Draper,K., McSwiggen,J. and Jarvis,T.
  TITLE     C-myb targeted ribozymes
  JOURNAL   Patent: US 5646042-A 966 08-JUL-1997;
FEATURES             Location/Qualifiers
     source          1. .17
                     /organism="unknown"
                     /mol_type="unassigned DNA"

  Query Match             1.6%;  Score 14;  DB 1;  Length 17;
  Best Local Similarity   100.0%;  Pred. No. 78;
  Matches   14;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        709 ATAGTTTTATAAAA 722
              ||||||||||||||
Db          1 ATAGTTTTATAAAA 14


RESULT 87
AX215042/c
LOCUS       AX215042                 17 bp    RNA     linear   PAT 07-SEP-2001
DEFINITION  Sequence 484 from Patent WO0159103.
ACCESSION   AX215042
VERSION     AX215042.1  GI:15525085
KEYWORDS    .
SOURCE      synthetic construct
  ORGANISM  synthetic construct
            other sequences; artificial sequences.
REFERENCE   1
  AUTHORS   Blatt,L., Mcswiggen,J. and Chowrira,B.M.
  TITLE     Method and reagent for the modulation and diagnosis of cd20 and
            nogo gene expression
  JOURNAL   Patent: WO 0159103-A 484 16-AUG-2001;
            RIBOZYME PHARMACEUTICALS, INC. (US) ; Blatt, Lawrence (US) ;
            McSwiggen, James (US) ; Chowrira, Bharat M. (US)
FEATURES             Location/Qualifiers
     source          1. .17
                     /organism="synthetic construct"
                     /mol_type="unassigned RNA"
                     /db_xref="taxon:32630"
                     /note="Nucleic Acid"

  Query Match             1.6%;  Score 14;  DB 1;  Length 17;
  Best Local Similarity   100.0%;  Pred. No. 78;
  Matches   14;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        674 TGAGAAACTGATTT 687
              ||||||||||||||
Db         14 TGAGAAACTGATTT 1


RESULT 88
AX215907/c
LOCUS       AX215907                 17 bp    RNA     linear   PAT 07-SEP-2001
DEFINITION  Sequence 1349 from Patent WO0159103.
ACCESSION   AX215907
VERSION     AX215907.1  GI:15525950
KEYWORDS    .
SOURCE      synthetic construct
  ORGANISM  synthetic construct
            other sequences; artificial sequences.
REFERENCE   1
  AUTHORS   Blatt,L., Mcswiggen,J. and Chowrira,B.M.
  TITLE     Method and reagent for the modulation and diagnosis of cd20 and
            nogo gene expression
  JOURNAL   Patent: WO 0159103-A 1349 16-AUG-2001;
            RIBOZYME PHARMACEUTICALS, INC. (US) ; Blatt, Lawrence (US) ;
            McSwiggen, James (US) ; Chowrira, Bharat M. (US)
FEATURES             Location/Qualifiers
     source          1. .17
                     /organism="synthetic construct"
                     /mol_type="unassigned RNA"
                     /db_xref="taxon:32630"
                     /note="Nucleic Acid"

  Query Match             1.6%;  Score 14;  DB 1;  Length 17;
  Best Local Similarity   100.0%;  Pred. No. 78;
  Matches   14;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        674 TGAGAAACTGATTT 687
              ||||||||||||||
Db         17 TGAGAAACTGATTT 4


RESULT 89
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AX216554/c
LOCUS       AX216554                17 bp    RNA     linear   PAT 07-SEP-2001
DEFINITION  Sequence 1996 from Patent WO0159103.
ACCESSION   AX216554
VERSION     AX216554.1  GI:15526615
KEYWORDS    .
SOURCE      synthetic construct
  ORGANISM  synthetic construct
            other sequences; artificial sequences.
REFERENCE   1
  AUTHORS   Blatt,L., Mcswiggen,J. and Chowrira,B.M.
  TITLE     Method and reagent for the modulation and diagnosis of cd20 and
            nogo gene expression
  JOURNAL   Patent: WO 0159103-A 1996 16-AUG-2001;
            RIBOZYME PHARMACEUTICALS, INC. (US) ; Blatt, Lawrence (US) ;
            McSwiggen, James (US) ; Chowrira, Bharat M. (US)
FEATURES             Location/Qualifiers
     source          1. .17
                     /organism="synthetic construct"
                     /mol_type="unassigned RNA"
                     /db_xref="taxon:32630"
                     /note="Nucleic Acid"

  Query Match             1.6%;  Score 14;  DB 1;  Length 17;
  Best Local Similarity   100.0%;  Pred. No. 78;
  Matches   14;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        674 TGAGAAACTGATTT 687
              ||||||||||||||
Db         16 TGAGAAACTGATTT 3


RESULT 90
BD257133
LOCUS       BD257133                17 bp    DNA     linear   PAT 17-JUL-2003
DEFINITION  Regulation of repressor genes using nucleic acid molecules.
ACCESSION   BD257133
VERSION     BD257133.1  GI:33066903
KEYWORDS    JP 2002541795-A/4926.
SOURCE      unidentified
  ORGANISM  unidentified
            unclassified.
REFERENCE   1  (bases 1 to 17)
  AUTHORS   Blatt,L., Zwick,M., Pavco,P. and Mcswiggen,J.
  TITLE     Regulation of repressor genes using nucleic acid molecules
  JOURNAL   Patent: JP 2002541795-A 4926 10-DEC-2002;
            RIBOZYME PHARMACEUTICALS INC
COMMENT     OS   Eukaryote
            PN   JP 2002541795-A/4926
            PD   10-DEC-2002
            PF   11-APR-2000 JP 2000611654
            PR   12-APR-1999 US    60/129390
            PI   LAWRENCE BLATT,MICHAEL ZWICK,PAMELA PAVCO,JAMES MCSWIGGEN PC
            C12N15/09,A61K38/00,A61K48/00,A61P43/00,A61P43/00,C12N5/10, PC
            C12P21/02,
            PC
            C12P21/02,C12P21/02//A61K31/711,(C12N5/10,C12R1:91),(C12P21/02, PC
             C12R1:91),
            PC   (C12P21/02,C12R1:91),(C12P21/02,C12R1:91),C12N15/00,C12N5/00,
            PC   A61K37/02,
            PC   (C12N5/00,C12R1:91)
            CC   Regulation of repressor genes using nucleic acid molecules FH
             Key             Location/Qualifiers
            FT   source          1. .17
            FT                   /organism='Eukaryote'.
FEATURES             Location/Qualifiers
     source          1. .17
                     /organism="unidentified"
                     /mol_type="genomic DNA"
                     /db_xref="taxon:32644"

  Query Match             1.6%;  Score 13.8;  DB 1;  Length 17;
  Best Local Similarity   88.2%;  Pred. No. 81;
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        776 GATGGGTATTAAACTTG 792
              ||||||| |||||| ||
Db          1 GATGGGTTTTAAACATG 17


RESULT 91
BD257134
LOCUS       BD257134                17 bp    DNA     linear   PAT 17-JUL-2003
DEFINITION  Regulation of repressor genes using nucleic acid molecules.
ACCESSION   BD257134
VERSION     BD257134.1  GI:33066904
KEYWORDS    JP 2002541795-A/4927.
SOURCE      unidentified
  ORGANISM  unidentified
            unclassified.
REFERENCE   1  (bases 1 to 17)
  AUTHORS   Blatt,L., Zwick,M., Pavco,P. and Mcswiggen,J.
  TITLE     Regulation of repressor genes using nucleic acid molecules
  JOURNAL   Patent: JP 2002541795-A 4927 10-DEC-2002;
            RIBOZYME PHARMACEUTICALS INC
COMMENT     OS   Eukaryote
            PN   JP 2002541795-A/4927
            PD   10-DEC-2002
            PF   11-APR-2000 JP 2000611654
            PR   12-APR-1999 US    60/129390
            PI   LAWRENCE BLATT,MICHAEL ZWICK,PAMELA PAVCO,JAMES MCSWIGGEN PC
            C12N15/09,A61K38/00,A61K48/00,A61P43/00,A61P43/00,C12N5/10, PC
            C12P21/02,
            PC
            C12P21/02,C12P21/02//A61K31/711,(C12N5/10,C12R1:91),(C12P21/02, PC
             C12R1:91),
            PC   (C12P21/02,C12R1:91),(C12P21/02,C12R1:91),C12N15/00,C12N5/00,
            PC   A61K37/02,
            PC   (C12N5/00,C12R1:91)
            CC   Regulation of repressor genes using nucleic acid molecules FH
             Key             Location/Qualifiers
            FT   source          1. .17
            FT                   /organism='Eukaryote'.
FEATURES             Location/Qualifiers
     source          1. .17
                     /organism="unidentified"
                     /mol_type="genomic DNA"
                     /db_xref="taxon:32644"

  Query Match             1.6%;  Score 13.8;  DB 1;  Length 17;
  Best Local Similarity   88.2%;  Pred. No. 81;
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        777 ATGGGTATTAAACTTGT 793
              ||||| |||||| |||
Db          1 ATGGGTTTTAAACATGT 17


RESULT 92
BD257135
LOCUS       BD257135                17 bp    DNA     linear   PAT 17-JUL-2003
DEFINITION  Regulation of repressor genes using nucleic acid molecules.
ACCESSION   BD257135
VERSION     BD257135.1  GI:33066905
KEYWORDS    JP 2002541795-A/4928.
SOURCE      unidentified
  ORGANISM  unidentified
            unclassified.
REFERENCE   1  (bases 1 to 17)
  AUTHORS   Blatt,L., Zwick,M., Pavco,P. and Mcswiggen,J.
  TITLE     Regulation of repressor genes using nucleic acid molecules
  JOURNAL   Patent: JP 2002541795-A 4928 10-DEC-2002;
            RIBOZYME PHARMACEUTICALS INC
COMMENT     OS   Eukaryote
            PN   JP 2002541795-A/4928
            PD   10-DEC-2002
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            PF   11-APR-2000 JP 2000611654
            PR   12-APR-1999 US    60/129390
            PI   LAWRENCE BLATT,MICHAEL ZWICK,PAMELA PAVCO,JAMES MCSWIGGEN PC
            C12N15/09,A61K38/00,A61K48/00,A61P43/00,A61P43/00,C12N5/10, PC
            C12P21/02,
            PC
            C12P21/02,C12P21/02//A61K31/711,(C12N5/10,C12R1:91),(C12P21/02, PC
             C12R1:91),
            PC   (C12P21/02,C12R1:91),(C12P21/02,C12R1:91),C12N15/00,C12N5/00,
            PC   A61K37/02,
            PC   (C12N5/00,C12R1:91)
            CC   Regulation of repressor genes using nucleic acid molecules FH
             Key             Location/Qualifiers
            FT   source          1. .17
            FT                   /organism='Eukaryote'.
FEATURES             Location/Qualifiers
     source          1. .17
                     /organism="unidentified"
                     /mol_type="genomic DNA"
                     /db_xref="taxon:32644"

  Query Match             1.6%;  Score 13.8;  DB 1;  Length 17;
  Best Local Similarity   88.2%;  Pred. No. 81;
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        778 TGGGTATTAAACTTGTC 794
              ||||| |||||| ||||
Db          1 TGGGTTTTAAACATGTC 17


RESULT 93
CQ624220
LOCUS       CQ624220                  17 bp    DNA     linear   PAT 02-FEB-2004
DEFINITION  Sequence 8960 from Patent WO0192524.
ACCESSION   CQ624220
VERSION     CQ624220.1  GI:41674438
KEYWORDS    .
SOURCE      Homo sapiens (human)
  ORGANISM  Homo sapiens
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE   1
  AUTHORS   Gu,Y., Ji,Y., Penn,S.G., Hanzel,D.K., Rank,D.R., Chen,W. and
            Shannon,M.E.
  TITLE     Myosin-like gene expressed in human heart and muscle
  JOURNAL   Patent: WO 0192524-A 8960 06-DEC-2001;
            Aeomica, Inc. (US)
FEATURES             Location/Qualifiers
     source          1. .17
                     /organism="Homo sapiens"
                     /mol_type="unassigned DNA"
                     /db_xref="taxon:9606"

  Query Match             1.6%;  Score 13.8;  DB 1;  Length 17;
  Best Local Similarity   88.2%;  Pred. No. 81;
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        183 CTGAAGGCCTGCATGGA 199
              |||||||||  ||||||
Db          1 CTGAAGGCCGACATGGA 17


RESULT 94
I06874/c
LOCUS       I06874                    17 bp    DNA     linear   PAT 02-DEC-1994
DEFINITION  Sequence 5 from Patent EP 0340805.
ACCESSION   I06874
VERSION     I06874.1  GI:589851
KEYWORDS    .
SOURCE      Unknown.
  ORGANISM  Unknown.
            Unclassified.
REFERENCE   1  (bases 1 to 17)
  AUTHORS   Hallewell,R.A. and Mullenbach,G.T.
  TITLE     Superoxide dismutase and expression in microorganisms
  JOURNAL   Patent: EP 0340805-A1 5 08-NOV-1989;
FEATURES             Location/Qualifiers
     source          1. .17
                     /organism="unknown"
                     /mol_type="unassigned DNA"

  Query Match             1.6%;  Score 13.8;  DB 1;  Length 17;
  Best Local Similarity   88.2%;  Pred. No. 81;
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        392 GACCATTGCATCATTGG 408
              ||||| ||||||||  ||
Db         17 GACCACTGCATCATCGG 1


RESULT 95
AR190462/c
LOCUS       AR190462                  17 bp    DNA     linear   PAT 20-APR-2002
DEFINITION  Sequence 5950 from patent US 6346398.
ACCESSION   AR190462
VERSION     AR190462.1  GI:20236427
KEYWORDS    .
SOURCE      Unknown.
  ORGANISM  Unknown.
            Unclassified.
REFERENCE   1  (bases 1 to 17)
  AUTHORS   Pavco,P., McSwiggen,J., Stinchcomb,D. and Escobedo,J.
  TITLE     Method and reagent for the treatment of diseases or conditions
            related to levels of vascular endothelial growth factor receptor
  JOURNAL   Patent: US 6346398-A 5950 12-FEB-2002;
FEATURES             Location/Qualifiers
     source          1. .17
                     /organism="unknown"
                     /mol_type="unassigned DNA"

  Query Match             1.6%;  Score 13.8;  DB 1;  Length 17;
  Best Local Similarity   88.2%;  Pred. No. 81;
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        543 TGTAGTCTGAGGCCCCT 559
              || |||||||| ||||
Db         17 TGCAGTCTGAGGTCCCT 1


RESULT 96
AR325385/c
LOCUS       AR325385                  17 bp    RNA     linear   PAT 17-AUG-2003
DEFINITION  Sequence 2787 from patent US 6566127.
ACCESSION   AR325385
VERSION     AR325385.1  GI:33711193
KEYWORDS    .
SOURCE      Unknown.
  ORGANISM  Unknown.
            Unclassified.
REFERENCE   1  (bases 1 to 17)
  AUTHORS   Pavco,P., McSwiggen,J.A., Stinchcomb,D.T. and Escobedo,J.
  TITLE     Method and reagent for the treatment of diseases or conditions
            related to levels of vascular endothelial growth factor receptor
  JOURNAL   Patent: US 6566127-A 2787 20-MAY-2003;
FEATURES             Location/Qualifiers
     source          1. .17
                     /organism="unknown"
                     /mol_type="unassigned RNA"

  Query Match             1.6%;  Score 13.8;  DB 1;  Length 17;
  Best Local Similarity   88.2%;  Pred. No. 81;
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        543 TGTAGTCTGAGGCCCCT 559
              || |||||||| ||||
Db         17 TGCAGTCTGAGGTCCCT 1
```

```
RESULT 97
AR327698/c
LOCUS       AR327698                  17 bp    RNA     linear   PAT 17-AUG-2003
DEFINITION  Sequence 5100 from patent US 6566127.
ACCESSION   AR327698
VERSION     AR327698.1  GI:33713506
KEYWORDS    .
SOURCE      Unknown.
  ORGANISM  Unknown.
            Unclassified.
REFERENCE   1  (bases 1 to 17)
  AUTHORS   Pavco,P., McSwiggen,J.A., Stinchcomb,D.T. and Escobedo,J.
  TITLE     Method and reagent for the treatment of diseases or conditions
            related to levels of vascular endothelial growth factor receptor
  JOURNAL   Patent: US 6566127-A 5100 20-MAY-2003;
FEATURES             Location/Qualifiers
     source          1. .17
                     /organism="unknown"
                     /mol_type="unassigned RNA"

  Query Match             1.6%;  Score 13.8;  DB 1;  Length 17;
  Best Local Similarity   88.2%;  Pred. No. 81;
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        239 ACCAGTGCAGGTCCTCA 255
              | |||||||| ||||||
Db         17 ATCAGTGCAGCTCCTCA 1


RESULT 98
AR329394
LOCUS       AR329394                  17 bp    RNA     linear   PAT 17-AUG-2003
DEFINITION  Sequence 6796 from patent US 6566127.
ACCESSION   AR329394
VERSION     AR329394.1  GI:33715202
KEYWORDS    .
SOURCE      Unknown.
  ORGANISM  Unknown.
            Unclassified.
REFERENCE   1  (bases 1 to 17)
  AUTHORS   Pavco,P., McSwiggen,J.A., Stinchcomb,D.T. and Escobedo,J.
  TITLE     Method and reagent for the treatment of diseases or conditions
            related to levels of vascular endothelial growth factor receptor
  JOURNAL   Patent: US 6566127-A 6796 20-MAY-2003;
FEATURES             Location/Qualifiers
     source          1. .17
                     /organism="unknown"
                     /mol_type="unassigned RNA"

  Query Match             1.6%;  Score 13.8;  DB 1;  Length 17;
  Best Local Similarity   88.2%;  Pred. No. 81;
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        642 ACTTTTTCAGAGTTGCT 658
              || |||||||||||| |
Db          1 ACGTTTTCAGAGTTGGT 17


RESULT 99
AR465283
LOCUS       AR465283                  17 bp    DNA     linear   PAT 20-FEB-2004
DEFINITION  Sequence 8960 from patent US 6686188.
ACCESSION   AR465283
VERSION     AR465283.1  GI:42700340
KEYWORDS    .
SOURCE      Unknown.
  ORGANISM  Unknown.
            Unclassified.
REFERENCE   1  (bases 1 to 17)
  AUTHORS   Gu,Y., Ji,Y., Penn,S.G., Hanzel,D.K., Rank,D.R., Chen,W. and
            Shannon,M.E.
  TITLE     Polynucleotide encoding a human myosin-like polypeptide expressed
            predominantly in heart and muscle
  JOURNAL   Patent: US 6686188-A 8960 03-FEB-2004;
FEATURES             Location/Qualifiers
     source          1. .17
                     /organism="unknown"
                     /mol_type="genomic DNA"

  Query Match             1.6%;  Score 13.8;  DB 1;  Length 17;
  Best Local Similarity   88.2%;  Pred. No. 81;
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        183 CTGAAGGCCTGCATGGA 199
              ||||||||| ||||||
Db          1 CTGAAGGCCGACATGGA 17


RESULT 100
AX081872/c
LOCUS       AX081872                  17 bp    DNA     linear   PAT 27-FEB-2001
DEFINITION  Sequence 116 from Patent WO0109183.
ACCESSION   AX081872
VERSION     AX081872.1  GI:13170679
KEYWORDS    .
SOURCE      synthetic construct
  ORGANISM  synthetic construct
            other sequences; artificial sequences.
REFERENCE   1
  AUTHORS   Brinkmann,U., Hoffmeyer,S., Eichelbaum,M. and Roots,I.
  TITLE     Polymorphisms in the human mdr-1 gene and their use in diagnostic
            and therapeutic applications
  JOURNAL   Patent: WO 0109183-A 116 08-FEB-2001;
            EPIDAUROS AG Biotechnologie Aktiengesellschaft (DE)
FEATURES             Location/Qualifiers
     source          1. .17
                     /organism="synthetic construct"
                     /mol_type="unassigned DNA"
                     /db_xref="taxon:32630"
                     /note="synthetic"

  Query Match             1.6%;  Score 13.8;  DB 1;  Length 17;
  Best Local Similarity   88.2%;  Pred. No. 81;
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        319 GGGCAATGTGACTGCTG 335
              | ||||||| |||||||
Db         17 GTGCAATGTAACTGCTG 1


RESULT 101
AX215655/c
LOCUS       AX215655                  17 bp    RNA     linear   PAT 07-SEP-2001
DEFINITION  Sequence 1097 from Patent WO0159103.
ACCESSION   AX215655
VERSION     AX215655.1  GI:15525698
KEYWORDS    .
SOURCE      synthetic construct
  ORGANISM  synthetic construct
            other sequences; artificial sequences.
REFERENCE   1
  AUTHORS   Blatt,L., Mcswiggen,J. and Chowrira,B.M.
  TITLE     Method and reagent for the modulation and diagnosis of cd20 and
            nogo gene expression
  JOURNAL   Patent: WO 0159103-A 1097 16-AUG-2001;
            RIBOZYME PHARMACEUTICALS, INC. (US) ; Blatt, Lawrence (US) ;
            McSwiggen, James (US) ; Chowrira, Bharat M. (US)
FEATURES             Location/Qualifiers
     source          1. .17
                     /organism="synthetic construct"
                     /mol_type="unassigned RNA"
                     /db_xref="taxon:32630"
                     /note="Nucleic Acid"
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  Query Match             1.6%;  Score 13.8;  DB 1;  Length 17;
  Best Local Similarity   88.2%;  Pred. No. 81;
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        730 AAAATGTCTGTTTCAAT 746
              ||||||| |||| ||||
Db         17 AAAATGTTTGTTGCAAT 1


RESULT 102
AX265751
LOCUS       AX265751                  17 bp    DNA     linear   PAT 26-OCT-2001
DEFINITION  Sequence 3142 from Patent WO0173002.
ACCESSION   AX265751
VERSION     AX265751.1  GI:16514550
KEYWORDS    .
SOURCE      Homo sapiens (human)
  ORGANISM  Homo sapiens
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE   1
  AUTHORS   Kmiec,E.B., Gamper,H.B. and Rice,M.C.
  TITLE     Targeted chromosomal genomic alterations with modified single
            stranded oligonucleotides
  JOURNAL   Patent: WO 0173002-A 3142 04-OCT-2001;
            UNIVERSITY OF DELAWARE (US)
FEATURES             Location/Qualifiers
     source          1. .17
                     /organism="Homo sapiens"
                     /mol_type="unassigned DNA"
                     /db_xref="taxon:9606"

  Query Match             1.6%;  Score 13.8;  DB 1;  Length 17;
  Best Local Similarity   88.2%;  Pred. No. 81;
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        676 AGAAACTGATTTATGAT 692
              ||| ||| |||||||||
Db          1 AGATACTCATTTATGAT 17


RESULT 103
AX265752/c
LOCUS       AX265752                  17 bp    DNA     linear   PAT 26-OCT-2001
DEFINITION  Sequence 3143 from Patent WO0173002.
ACCESSION   AX265752
VERSION     AX265752.1  GI:16514551
KEYWORDS    .
SOURCE      Homo sapiens (human)
  ORGANISM  Homo sapiens
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE   1
  AUTHORS   Kmiec,E.B., Gamper,H.B. and Rice,M.C.
  TITLE     Targeted chromosomal genomic alterations with modified single
            stranded oligonucleotides
  JOURNAL   Patent: WO 0173002-A 3143 04-OCT-2001;
            UNIVERSITY OF DELAWARE (US)
FEATURES             Location/Qualifiers
     source          1. .17
                     /organism="Homo sapiens"
                     /mol_type="unassigned DNA"
                     /db_xref="taxon:9606"

  Query Match             1.6%;  Score 13.8;  DB 1;  Length 17;
  Best Local Similarity   88.2%;  Pred. No. 81;
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        676 AGAAACTGATTTATGAT 692
              ||| ||| |||||||||
Db         17 AGATACTCATTTATGAT 1


RESULT 104
AX691936
LOCUS       AX691936                  17 bp    DNA     linear   PAT 31-MAR-2003.
DEFINITION  Sequence 4668 from Patent EP1281758.
ACCESSION   AX691936
VERSION     AX691936.1  GI:29414877
KEYWORDS    .
SOURCE      Homo sapiens (human)
  ORGANISM  Homo sapiens
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE   1
  AUTHORS   Shannon,M., Gu,Y. and Nguyen,C.T.
  TITLE     Four human zinc-finger-containing proteins : mdz3, mdz4, mdz7 and
            mdz12
  JOURNAL   Patent: EP 1281758-A 4668 05-FEB-2003;
            Aeomica, Inc. (US)
FEATURES             Location/Qualifiers
     source          1. .17
                     /organism="Homo sapiens"
                     /mol_type="unassigned DNA"
                     /db_xref="taxon:9606"

  Query Match             1.6%;  Score 13.8;  DB 1;  Length 17;
  Best Local Similarity   88.2%;  Pred. No. 81;
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        549 CTGAGGCCCCTTAACTC 565
              |||||||||| | |||
Db          1 CTGAGGCCCCTCAGCTC 17


RESULT 105
AX782232/c
LOCUS       AX782232                  17 bp    DNA     linear   PAT 17-JUL-2003
DEFINITION  Sequence 563 from Patent WO03050284.
ACCESSION   AX782232
VERSION     AX782232.1  GI:32950081
KEYWORDS    .
SOURCE      Homo sapiens (human)
  ORGANISM  Homo sapiens
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE   1
  AUTHORS   Guo,J.
  TITLE     Human prostate cancer candidate protein 1
  JOURNAL   Patent: WO 03050284-A 563 19-JUN-2003;
            Amersham Biosciences (SV) Corp. (US)
FEATURES             Location/Qualifiers
     source          1. .17
                     /organism="Homo sapiens"
                     /mol_type="unassigned DNA"
                     /db_xref="taxon:9606"

  Query Match             1.6%;  Score 13.8;  DB 1;  Length 17;
  Best Local Similarity   88.2%;  Pred. No. 81;
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        635 TTGTGTGACTTTTTCAG 651
              || || ||||||||||
Db         17 TTCTGAGACTTTTTCAG 1


RESULT 106
CQ821404
LOCUS       CQ821404                  15 bp    DNA     linear   PAT 14-JUN-2004
DEFINITION  Sequence 10 from Patent WO2004038019.
ACCESSION   CQ821404
VERSION     CQ821404.1  GI:48716053
KEYWORDS    .
SOURCE      Homo sapiens (human)
  ORGANISM  Homo sapiens
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
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            Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE   1
  AUTHORS   Beeson,D., Wood,M. and Abdelgany,A.
  TITLE     Dnazyme cleaving mutant polynucleotides
  JOURNAL   Patent: WO 2004038019-A 10 06-MAY-2004;
            ISIS INNOVATION LIMITED (GB)
FEATURES             Location/Qualifiers
     source          1. .15
                     /organism="Homo sapiens"
                     /mol_type="unassigned DNA"
                     /db_xref="taxon:9606"

  Query Match             1.5%;  Score 13.4;  DB 1;  Length 15;
  Best Local Similarity   93.3%;  Pred. No. 77;
  Matches   14;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy         95 GGCGACGGCCCAGTG 109
              |||||| ||||||||
Db          1 GGCGACCGCCCAGTG 15


RESULT 107
CQ821409
LOCUS       CQ821409                 15 bp    DNA     linear   PAT 14-JUN-2004
DEFINITION  Sequence 15 from Patent WO2004038019.
ACCESSION   CQ821409
VERSION     CQ821409.1  GI:48716058
KEYWORDS    .
SOURCE      Homo sapiens (human)
  ORGANISM  Homo sapiens
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE   1
  AUTHORS   Beeson,D., Wood,M. and Abdelgany,A.
  TITLE     Dnazyme cleaving mutant polynucleotides
  JOURNAL   Patent: WO 2004038019-A 15 06-MAY-2004;
            ISIS INNOVATION LIMITED (GB)
FEATURES             Location/Qualifiers
     source          1. .15
                     /organism="Homo sapiens"
                     /mol_type="unassigned DNA"
                     /db_xref="taxon:9606"

  Query Match             1.5%;  Score 13.4;  DB 1;  Length 15;
  Best Local Similarity   93.3%;  Pred. No. 77;
  Matches   14;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy         437 GATGACTTGGGCAAA 451
               ||||||| |||||||
Db          1 GATGACTCGGGCAAA 15


RESULT 108
BD178695/c
LOCUS       BD178695                 16 bp    DNA     linear   PAT 16-APR-2003
DEFINITION  Gene panel for genes involving liver regeneration.
ACCESSION   BD178695
VERSION     BD178695.1  GI:30015962
KEYWORDS    WO 02077222-A/33.
SOURCE      synthetic construct
  ORGANISM  synthetic construct
            other sequences; artificial sequences.
REFERENCE   1  (bases 1 to 16)
  AUTHORS   Yokoya,F., Okutsu,T., Mori,M., Yoshiyuki, Takahara, Fukuda,H.,
            Aburatani,H. and Sonaka,I.
  TITLE     Gene panel for genes involving liver regeneration
  JOURNAL   Patent: WO 02077222-A 33 03-OCT-2002;
            AJINOMOTO CO INC,FUMIHIKO YOKOYA,TOMOHISA OKUTSU,MAIKO MORI,
            YOSHIYUKI TAKAHARA,HISAO FUKUDA,HIROYUKI ABURATANI,ICHIRO SONAKA
COMMENT     OS   Artificial Sequence
            PN   WO 02077222-A/33
            PD   03-OCT-2002
            PF   13-MAR-2002 WO 2002JP002372
            PR   13-MAR-2001 JP 01P   070940
            PI   FUMIHIKO YOKOYA,TOMOHISA OKUTSU,MAIKO MORI,YOSHIYUKI PI
            TAKAHARA,HISAO FUKUDA,
            PI   HIROYUKI ABURATANI,ICHIRO SONAKA
            PC   C12N15/09,C12Q1/68,G01N33/15,G01N33/50,G01N37/00 CC
            Description of Artificial Sequence: primer
            FH   Key             Location/Qualifiers
            FT   source          1. .16
            FT                   /organism='Artificial Sequence'.
FEATURES             Location/Qualifiers
     source          1. .16
                     /organism="synthetic construct"
                     /mol_type="genomic DNA"
                     /db_xref="taxon:32630"

  Query Match             1.5%;  Score 13.4;  DB 1;  Length 16;
  Best Local Similarity   93.3%;  Pred. No. 82;
  Matches   14;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy         310 TGGAGACTTGGGCAA 324
               |||| ||||||||||
Db          15 TGGACACTTGGGCAA 1


RESULT 109
AR328540/c
LOCUS       AR328540                 16 bp    RNA     linear   PAT 17-AUG-2003
DEFINITION  Sequence 5942 from patent US 6566127.
ACCESSION   AR328540
VERSION     AR328540.1  GI:33714348
KEYWORDS    .
SOURCE      Unknown.
  ORGANISM  Unknown.
            Unclassified.
REFERENCE   1  (bases 1 to 16)
  AUTHORS   Pavco,P., McSwiggen,J.A., Stinchcomb,D.T. and Escobedo,J.
  TITLE     Method and reagent for the treatment of diseases or conditions
            related to levels of vascular endothelial growth factor receptor
  JOURNAL   Patent: US 6566127-A 5942 20-MAY-2003;
FEATURES             Location/Qualifiers
     source          1. .16
                     /organism="unknown"
                     /mol_type="unassigned RNA"

  Query Match             1.5%;  Score 13.4;  DB 1;  Length 16;
  Best Local Similarity   93.3%;  Pred. No. 82;
  Matches   14;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy         241 CAGTGCAGGTCCTCA 255
               |||||||| ||||||
Db          16 CAGTGCAGCTCCTCA 2


RESULT 110
AX600643
LOCUS       AX600643                 16 bp    DNA     linear   PAT 17-FEB-2003
DEFINITION  Sequence 2 from Patent WO02092853.
ACCESSION   AX600643
VERSION     AX600643.1  GI:28400597
KEYWORDS    .
SOURCE      Bacillus cereus
  ORGANISM  Bacillus cereus
            Bacteria; Firmicutes; Bacillales; Bacillaceae; Bacillus; Bacillus
            cereus group.
REFERENCE   1
  AUTHORS   Breen,A.W. and Singleton,F.L.
  TITLE     Detection of spore forming bacteria
  JOURNAL   Patent: WO 02092853-A 2 21-NOV-2002;
            HERCULES INCORPORATED (US)
FEATURES             Location/Qualifiers
     source          1. .16
                     /organism="Bacillus cereus"
                     /mol_type="unassigned DNA"
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                    /db_xref="taxon:1396"

  Query Match             1.5%;  Score 13.4;  DB 1;  Length 16;
  Best Local Similarity   93.3%;  Pred. No. 82;
  Matches   14;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        429 AAAAAGCAGATGACT 443
              ||||||||| |||||
Db          2 AAAAAGCAGTTGACT 16


RESULT 111
BD263834
LOCUS       BD263834                 13 bp    RNA     linear   PAT 17-JUL-2003
DEFINITION  Adeno-associated virus-delivered ribozyme compositions and methods
            of use.
ACCESSION   BD263834
VERSION     BD263834.1  GI:33073602
KEYWORDS    JP 2002542805-A/56.
SOURCE      synthetic construct
  ORGANISM  synthetic construct
            other sequences; artificial sequences.
REFERENCE   1  (bases 1 to 13)
  AUTHORS   Lewin,A.S., Muzyczka,N., Hauswirth,W.W., Teschendorf,C. and
            Burger,C.
  TITLE     Adeno-associated virus-delivered ribozyme compositions and methods
            of use
  JOURNAL   Patent: JP 2002542805-A 56 17-DEC-2002;
            UNIVERSITY OF FLORIDA
COMMENT     OS   Artificial Sequence
            PN   JP 2002542805-A/56
            PD   17-DEC-2002
            PF   28-APR-2000 JP 2000615402
            PR   30-APR-1999 US    60/131942
            PI   ALFRED S LEWIN,NICHOLAS MUZYCZKA,WILLIAM W HAUSWIRTH PI
            ,CHRISTIAN TESCHENDORF,
            PI   CORINNA BURGER
            PC   C12N15/09,A01K67/027,C12N9/00,C12Q1/68,C12N15/00 CC
            Description of Artificial Sequence: SYNTHETIC PEPTIDE FH   Key
                 Location/Qualifiers
            FT   source          1. .13
            FT                   /organism='Artificial Sequence'.
FEATURES              Location/Qualifiers
     source           1. .13
                      /organism="synthetic construct"
                      /mol_type="genomic RNA"
                      /db_xref="taxon:32630"

  Query Match             1.5%;  Score 13;  DB 1;  Length 13;
  Best Local Similarity   100.0%;  Pred. No. 73;
  Matches   13;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        245 GCAGGTCCTCACT 257
              |||||||||||||
Db          1 GCAGGTCCTCACT 13


RESULT 112
BD263836
LOCUS       BD263836                 13 bp    RNA     linear   PAT 17-JUL-2003
DEFINITION  Adeno-associated virus-delivered ribozyme compositions and methods
            of use.
ACCESSION   BD263836
VERSION     BD263836.1  GI:33073604
KEYWORDS    JP 2002542805-A/58.
SOURCE      synthetic construct
  ORGANISM  synthetic construct
            other sequences; artificial sequences.
REFERENCE   1  (bases 1 to 13)
  AUTHORS   Lewin,A.S., Muzyczka,N., Hauswirth,W.W., Teschendorf,C. and
            Burger,C.
  TITLE     Adeno-associated virus-delivered ribozyme compositions and methods
            of use
  JOURNAL   Patent: JP 2002542805-A 58 17-DEC-2002;
            UNIVERSITY OF FLORIDA
COMMENT     OS   Artificial Sequence
            PN   JP 2002542805-A/58
            PD   17-DEC-2002
            PF   28-APR-2000 JP 2000615402
            PR   30-APR-1999 US    60/131942
            PI   ALFRED S LEWIN,NICHOLAS MUZYCZKA,WILLIAM W HAUSWIRTH PI
            ,CHRISTIAN TESCHENDORF,
            PI   CORINNA BURGER
            PC   C12N15/09,A01K67/027,C12N9/00,C12Q1/68,C12N15/00 CC
            Description of Artificial Sequence: SYNTHETIC PEPTIDE FH   Key
                 Location/Qualifiers
            FT   source          1. .13
            FT                   /organism='Artificial Sequence'.
FEATURES              Location/Qualifiers
     source           1. .13
                      /organism="synthetic construct"
                      /mol_type="genomic RNA"
                      /db_xref="taxon:32630"

  Query Match             1.5%;  Score 13;  DB 1;  Length 13;
  Best Local Similarity   100.0%;  Pred. No. 73;
  Matches   13;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        354 ATGTGTCTATTGA 366
              |||||||||||||
Db          1 ATGTGTCTATTGA 13


RESULT 113
BD263838
LOCUS       BD263838                 13 bp    RNA     linear   PAT 17-JUL-2003
DEFINITION  Adeno-associated virus-delivered ribozyme compositions and methods
            of use.
ACCESSION   BD263838
VERSION     BD263838.1  GI:33073606
KEYWORDS    JP 2002542805-A/60.
SOURCE      synthetic construct
  ORGANISM  synthetic construct
            other sequences; artificial sequences.
REFERENCE   1  (bases 1 to 13)
  AUTHORS   Lewin,A.S., Muzyczka,N., Hauswirth,W.W., Teschendorf,C. and
            Burger,C.
  TITLE     Adeno-associated virus-delivered ribozyme compositions and methods
            of use
  JOURNAL   Patent: JP 2002542805-A 60 17-DEC-2002;
            UNIVERSITY OF FLORIDA
COMMENT     OS   Artificial Sequence
            PN   JP 2002542805-A/60
            PD   17-DEC-2002
            PF   28-APR-2000 JP 2000615402
            PR   30-APR-1999 US    60/131942
            PI   ALFRED S LEWIN,NICHOLAS MUZYCZKA,WILLIAM W HAUSWIRTH PI
            ,CHRISTIAN TESCHENDORF,
            PI   CORINNA BURGER
            PC   C12N15/09,A01K67/027,C12N9/00,C12Q1/68,C12N15/00 CC
            Description of Artificial Sequence: SYNTHETIC PEPTIDE FH   Key
                 Location/Qualifiers
            FT   source          1. .13
            FT                   /organism='Artificial Sequence'.
FEATURES              Location/Qualifiers
     source           1. .13
                      /organism="synthetic construct"
                      /mol_type="genomic RNA"
                      /db_xref="taxon:32630"

  Query Match             1.5%;  Score 13;  DB 1;  Length 13;
  Best Local Similarity   100.0%;  Pred. No. 73;
  Matches   13;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        418 GGTGGTCCATGAA 430
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Db          1 GGTGGTCCATGAA 13


RESULT 114
BD263840
LOCUS       BD263840                  13 bp    RNA     linear   PAT 17-JUL-2003
DEFINITION  Adeno-associated virus-delivered ribozyme compositions and methods
            of use.
ACCESSION   BD263840
VERSION     BD263840.1  GI:33073608
KEYWORDS    JP 2002542805-A/62.
SOURCE      synthetic construct
  ORGANISM  synthetic construct
            other sequences; artificial sequences.
REFERENCE   1  (bases 1 to 13)
  AUTHORS   Lewin,A.S., Muzyczka,N., Hauswirth,W.W., Teschendorf,C. and
            Burger,C.
  TITLE     Adeno-associated virus-delivered ribozyme compositions and methods
            of use
  JOURNAL   Patent: JP 2002542805-A 62 17-DEC-2002;
            UNIVERSITY OF FLORIDA
COMMENT     OS   Artificial Sequence
            PN   JP 2002542805-A/62
            PD   17-DEC-2002
            PF   28-APR-2000 JP 2000615402
            PR   30-APR-1999 US    60/131942
            PI   ALFRED S LEWIN,NICHOLAS MUZYCZKA,WILLIAM W HAUSWIRTH PI
            ,CHRISTIAN TESCHENDORF,
            PI   CORINNA BURGER
            PC   C12N15/09,A01K67/027,C12N9/00,C12Q1/68,C12N15/00 CC
            Description of Artificial Sequence: SYNTHETIC PEPTIDE FH   Key
                  Location/Qualifiers
            FT   source          1. .13
            FT                   /organism='Artificial Sequence'.
FEATURES              Location/Qualifiers
     source           1. .13
                      /organism="synthetic construct"
                      /mol_type="genomic RNA"
                      /db_xref="taxon:32630"

  Query Match             1.5%;  Score 13;  DB 1;  Length 13;
  Best Local Similarity   100.0%;  Pred. No. 73;
  Matches   13;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        488 GGAAGTCGTTTGG 500
              |||||||||||||
Db          1 GGAAGTCGTTTGG 13


RESULT 115
AX048320
LOCUS       AX048320                  13 bp    RNA     linear   PAT 15-DEC-2000
DEFINITION  Sequence 56 from Patent WO0066780.
ACCESSION   AX048320
VERSION     AX048320.1  GI:11877085
KEYWORDS    .
SOURCE      synthetic construct
  ORGANISM  synthetic construct
            other sequences; artificial sequences.
REFERENCE   1
  AUTHORS   Lewin,A.S., Muzyczka,N., Hauswirth,W.W., Teschendorf,C. and
            Burger,C.
  TITLE     Adeno-associated virus-delivered ribozyme compositions and methods
            of use
  JOURNAL   Patent: WO 0066780-A 56 09-NOV-2000;
            University of Florida (US)
FEATURES              Location/Qualifiers
     source           1. .13
                      /organism="synthetic construct"
                      /mol_type="unassigned RNA"
                      /db_xref="taxon:32630"
                      /note="SYNTHETIC PEPTIDE"

  Query Match             1.5%;  Score 13;  DB 1;  Length 13;
  Best Local Similarity   100.0%;  Pred. No. 73;
  Matches   13;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        245 GCAGGTCCTCACT 257
              |||||||||||||
Db          1 GCAGGTCCTCACT 13


RESULT 116
AX048322
LOCUS       AX048322                  13 bp    RNA     linear   PAT 15-DEC-2000
DEFINITION  Sequence 58 from Patent WO0066780.
ACCESSION   AX048322
VERSION     AX048322.1  GI:11877087
KEYWORDS    .
SOURCE      synthetic construct
  ORGANISM  synthetic construct
            other sequences; artificial sequences.
REFERENCE   1
  AUTHORS   Lewin,A.S., Muzyczka,N., Hauswirth,W.W., Teschendorf,C. and
            Burger,C.
  TITLE     Adeno-associated virus-delivered ribozyme compositions and methods
            of use
  JOURNAL   Patent: WO 0066780-A 58 09-NOV-2000;
            University of Florida (US)
FEATURES              Location/Qualifiers
     source           1. .13
                      /organism="synthetic construct"
                      /mol_type="unassigned RNA"
                      /db_xref="taxon:32630"
                      /note="SYNTHETIC PEPTIDE"

  Query Match             1.5%;  Score 13;  DB 1;  Length 13;
  Best Local Similarity   100.0%;  Pred. No. 73;
  Matches   13;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        354 ATGTGTCTATTGA 366
              |||||||||||||
Db          1 ATGTGTCTATTGA 13


RESULT 117
AX048324
LOCUS       AX048324                  13 bp    RNA     linear   PAT 15-DEC-2000
DEFINITION  Sequence 60 from Patent WO0066780.
ACCESSION   AX048324
VERSION     AX048324.1  GI:11877089
KEYWORDS    .
SOURCE      synthetic construct
  ORGANISM  synthetic construct
            other sequences; artificial sequences.
REFERENCE   1
  AUTHORS   Lewin,A.S., Muzyczka,N., Hauswirth,W.W., Teschendorf,C. and
            Burger,C.
  TITLE     Adeno-associated virus-delivered ribozyme compositions and methods
            of use
  JOURNAL   Patent: WO 0066780-A 60 09-NOV-2000;
            University of Florida (US)
FEATURES              Location/Qualifiers
     source           1. .13
                      /organism="synthetic construct"
                      /mol_type="unassigned RNA"
                      /db_xref="taxon:32630"
                      /note="SYNTHETIC PEPTIDE"

  Query Match             1.5%;  Score 13;  DB 1;  Length 13;
  Best Local Similarity   100.0%;  Pred. No. 73;
  Matches   13;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        418 GGTGGTCCATGAA 430
              |||||||||||||
Db          1 GGTGGTCCATGAA 13
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RESULT 118
AX048326
LOCUS       AX048326                  13 bp    RNA     linear   PAT 15-DEC-2000
DEFINITION  Sequence 62 from Patent WO0066780.
ACCESSION   AX048326
VERSION     AX048326.1  GI:11877091
KEYWORDS    .
SOURCE      synthetic construct
  ORGANISM  synthetic construct
            other sequences; artificial sequences.
REFERENCE   1
  AUTHORS   Lewin,A.S., Muzyczka,N., Hauswirth,W.W., Teschendorf,C. and
            Burger,C.
  TITLE     Adeno-associated virus-delivered ribozyme compositions and methods
            of use
  JOURNAL   Patent: WO 0066780-A 62 09-NOV-2000;
            University of Florida (US)
FEATURES             Location/Qualifiers
     source          1. .13
                     /organism="synthetic construct"
                     /mol_type="unassigned RNA"
                     /db_xref="taxon:32630"
                     /note="SYNTHETIC PEPTIDE"

  Query Match             1.5%;  Score 13;  DB 1;  Length 13;
  Best Local Similarity   100.0%;  Pred. No. 73;
  Matches   13;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        488 GGAAGTCGTTTGG 500
              |||||||||||||
Db          1 GGAAGTCGTTTGG 13


RESULT 119
CQ786469/c
LOCUS       CQ786469                  16 bp    DNA     linear   PAT 24-MAR-2004
DEFINITION  Sequence 31 from Patent WO2004020611.
ACCESSION   CQ786469
VERSION     CQ786469.1  GI:45721541
KEYWORDS    .
SOURCE      synthetic construct
  ORGANISM  synthetic construct
            other sequences; artificial sequences.
REFERENCE   1
  AUTHORS   Jonniaux,J.L., Valepyn,E., Corbisier,A.M. and Dauvrin,T.
  TITLE     Myrothecium sp. Transformation and expression system
  JOURNAL   Patent: WO 2004020611-A 31 11-MAR-2004;
            Puratos Naamloze Vennootschap (BE)
FEATURES             Location/Qualifiers
     source          1. .16
                     /organism="synthetic construct"
                     /mol_type="unassigned DNA"
                     /db_xref="taxon:32630"
                     /note="AMY5 primer"

  Query Match             1.5%;  Score 13;  DB 1;  Length 16;
  Best Local Similarity   100.0%;  Pred. No. 89;
  Matches   13;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        109 GCAGGGCATCATC 121
              |||||||||||||
Db         14 GCAGGGCATCATC 2


RESULT 120
AR329602
LOCUS       AR329602                  16 bp    RNA     linear   PAT 17-AUG-2003
DEFINITION  Sequence 7004 from patent US 6566127.
ACCESSION   AR329602
VERSION     AR329602.1  GI:33715410
KEYWORDS    .
SOURCE      Unknown.
  ORGANISM  Unknown.
            Unclassified.
REFERENCE   1  (bases 1 to 16)
  AUTHORS   Pavco,P., McSwiggen,J.A., Stinchcomb,D.T. and Escobedo,J.
  TITLE     Method and reagent for the treatment of diseases or conditions
            related to levels of vascular endothelial growth factor receptor
  JOURNAL   Patent: US 6566127-A 7004 20-MAY-2003;
FEATURES             Location/Qualifiers
     source          1. .16
                     /organism="unknown"
                     /mol_type="unassigned RNA"

  Query Match             1.5%;  Score 13;  DB 1;  Length 16;
  Best Local Similarity   100.0%;  Pred. No. 89;
  Matches   13;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        421 GGTCCATGAAAAA 433
              |||||||||||||
Db          4 GGTCCATGAAAAA 16


RESULT 121
A10669
LOCUS       A10669                    16 bp    DNA     linear   PAT 02-DEC-1993
DEFINITION  Oligonucleotide (H6).
ACCESSION   A10669
VERSION     A10669.1  GI:490795
KEYWORDS    .
SOURCE      synthetic construct
  ORGANISM  synthetic construct
            other sequences; artificial sequences.
REFERENCE   1  (bases 1 to 16)
  AUTHORS   Ueda,I., Niwa,M., Saito,Y., Sato,S., Ono,H. and Kitaguchi,T.
  TITLE     Process for production of gamma-interferon
  JOURNAL   Patent: EP 0176916-A 54 09-APR-1986;
            FUJISAWA PHARMACEUTICAL CO., LTD
FEATURES             Location/Qualifiers
     source          1. .16
                     /organism="synthetic construct"
                     /mol_type="unassigned DNA"
                     /db_xref="taxon:32630"

  Query Match             1.5%;  Score 12.8;  DB 1;  Length 16;
  Best Local Similarity   87.5%;  Pred. No. 92;
  Matches   14;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        691 ATCACTTGGAAGATTT 706
              |||||||||| || ||
Db          1 ATCACTTGGATGAGTT 16


RESULT 122
CQ821403
LOCUS       CQ821403                  16 bp    DNA     linear   PAT 14-JUN-2004
DEFINITION  Sequence 9 from Patent WO2004038019.
ACCESSION   CQ821403
VERSION     CQ821403.1  GI:48716052
KEYWORDS    .
SOURCE      Homo sapiens (human)
  ORGANISM  Homo sapiens
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE   1
  AUTHORS   Beeson,D., Wood,M. and Abdelgany,A.
  TITLE     Dnazyme cleaving mutant polynucleotides
  JOURNAL   Patent: WO 2004038019-A 9 06-MAY-2004;
            ISIS INNOVATION LIMITED (GB)
FEATURES             Location/Qualifiers
     source          1. .16
                     /organism="Homo sapiens"
                     /mol_type="unassigned DNA"
                     /db_xref="taxon:9606"
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  Query Match             1.5%;  Score 12.8;  DB 1;  Length 16;
  Best Local Similarity   87.5%;  Pred. No. 92;
  Matches   14;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy         94 GGGCGACGGCCCAGTG 109
              || |||| ||||||||
Db          1 GGCCGACCGCCCAGTG 16


RESULT 123
AR328567/c
LOCUS       AR328567                 16 bp    RNA     linear   PAT 17-AUG-2003
DEFINITION  Sequence 5969 from patent US 6566127.
ACCESSION   AR328567
VERSION     AR328567.1  GI:33714375
KEYWORDS    .
SOURCE      Unknown.
  ORGANISM  Unknown.
            Unclassified.
REFERENCE   1  (bases 1 to 16)
  AUTHORS   Pavco,P., McSwiggen,J.A., Stinchcomb,D.T. and Escobedo,J.
  TITLE     Method and reagent for the treatment of diseases or conditions
            related to levels of vascular endothelial growth factor receptor
  JOURNAL   Patent: US 6566127-A 5969 20-MAY-2003;
FEATURES             Location/Qualifiers
     source          1. .16
                     /organism="unknown"
                     /mol_type="unassigned RNA"

  Query Match             1.5%;  Score 12.8;  DB 1;  Length 16;
  Best Local Similarity   87.5%;  Pred. No. 92;
  Matches   14;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        638 TGTGACTTTTTCAGAG 653
              |||||| ||||||| |
Db         16 TGTGACATTTTCAGTG 1


RESULT 124
AR328701
LOCUS       AR328701                 16 bp    RNA     linear   PAT 17-AUG-2003
DEFINITION  Sequence 6103 from patent US 6566127.
ACCESSION   AR328701
VERSION     AR328701.1  GI:33714509
KEYWORDS    .
SOURCE      Unknown.
  ORGANISM  Unknown.
            Unclassified.
REFERENCE   1  (bases 1 to 16)
  AUTHORS   Pavco,P., McSwiggen,J.A., Stinchcomb,D.T. and Escobedo,J.
  TITLE     Method and reagent for the treatment of diseases or conditions
            related to levels of vascular endothelial growth factor receptor
  JOURNAL   Patent: US 6566127-A 6103 20-MAY-2003;
FEATURES             Location/Qualifiers
     source          1. .16
                     /organism="unknown"
                     /mol_type="unassigned RNA"

  Query Match             1.5%;  Score 12.8;  DB 1;  Length 16;
  Best Local Similarity   87.5%;  Pred. No. 92;
  Matches   14;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        424 CCATGAAAAAGCAGAT 439
              ||||||||| ||| ||
Db          1 CCATGAAAATGCAAAT 16


RESULT 125
AX040892
LOCUS       AX040892                 16 bp    DNA     linear   PAT 23-NOV-2000
DEFINITION  Sequence 37 from Patent WO0065090.
ACCESSION   AX040892
VERSION     AX040892.1  GI:11340514
KEYWORDS    .
SOURCE      synthetic construct
  ORGANISM  synthetic construct
            other sequences; artificial sequences.
REFERENCE   1
  AUTHORS   Lok,S. and Whitmore,T.E.
  TITLE     The insulin receptor-related receptor gene sequence for diagnosis
            of human obesity and diabetic disorders
  JOURNAL   Patent: WO 0065090-A 37 02-NOV-2000;
            ZymoGenetics, Inc. (US)
FEATURES             Location/Qualifiers
     source          1. .16
                     /organism="synthetic construct"
                     /mol_type="unassigned DNA"
                     /db_xref="taxon:32630"
                     /note="Oligonucleotide"

  Query Match             1.5%;  Score 12.8;  DB 1;  Length 16;
  Best Local Similarity   87.5%;  Pred. No. 92;
  Matches   14;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        380 TCACTCTCAGGAGACC 395
              | |||||||||||  ||
Db          1 TTACTCTCAGGAGGCC 16


RESULT 126
CQ821410
LOCUS       CQ821410                 14 bp    DNA     linear   PAT 14-JUN-2004
DEFINITION  Sequence 16 from Patent WO2004038019.
ACCESSION   CQ821410
VERSION     CQ821410.1  GI:48716059
KEYWORDS    .
SOURCE      Homo sapiens (human)
  ORGANISM  Homo sapiens
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE   1
  AUTHORS   Beeson,D., Wood,M. and Abdelgany,A.
  TITLE     Dnazyme cleaving mutant polynucleotides
  JOURNAL   Patent: WO 2004038019-A 16 06-MAY-2004;
            ISIS INNOVATION LIMITED (GB)
FEATURES             Location/Qualifiers
     source          1. .14
                     /organism="Homo sapiens"
                     /mol_type="unassigned DNA"
                     /db_xref="taxon:9606"

  Query Match             1.4%;  Score 12.4;  DB 1;  Length 14;
  Best Local Similarity   92.9%;  Pred. No. 88;
  Matches   13;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        437 GATGACTTGGGCAA 450
              ||||||| ||||||
Db          1 GATGACTCGGGCAA 14


RESULT 127
AX081113
LOCUS       AX081113                 14 bp    DNA     linear   PAT 27-FEB-2001
DEFINITION  Sequence 13 from Patent WO0109385.
ACCESSION   AX081113
VERSION     AX081113.1  GI:13170025
KEYWORDS    .
SOURCE      synthetic construct
  ORGANISM  synthetic construct
            other sequences; artificial sequences.
REFERENCE   1
  AUTHORS   Lukhtanov,E.A., Podyminogin,M.A. and Hedgpeth,J.
  TITLE     Attachment of oligonucleotides to solid supports through schiff
            base type linkages for capture and detection of nucleic acids
  JOURNAL   Patent: WO 0109385-A 13 08-FEB-2001;
```

```
          Epoch Pharmaceuticals, Inc. (US)
FEATURES             Location/Qualifiers
     source          1. .14
                     /organism="synthetic construct"
                     /mol_type="unassigned DNA"
                     /db_xref="taxon:32630"
                     /note="probe~5' Ald"

  Query Match             1.4%;  Score 12.4;  DB 1;  Length 14;
  Best Local Similarity   92.9%;  Pred. No. 88;
  Matches   13;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        496 TTTGGCTTGTGGTG 509
              ||||||| ||||||
Db          1 TTTGGCTGGTGGTG 14


RESULT 128
I35229/c
LOCUS       I35229                  15 bp    DNA     linear   PAT 13-MAY-1997
DEFINITION  Sequence 197 from patent US 5599706.
ACCESSION   I35229
VERSION     I35229.1  GI:2088197
KEYWORDS    .
SOURCE      Unknown.
  ORGANISM  Unknown.
            Unclassified.
REFERENCE   1  (bases 1 to 15)
  AUTHORS   Stinchcomb,D.T., McSwiggen,J., Newton,R.S. and Ramharack,R.
  TITLE     Ribozymes targeted to apo(a) mRNA
  JOURNAL   Patent: US 5599706-A 197 04-FEB-1997;
FEATURES             Location/Qualifiers
     source          1. .15
                     /organism="unknown"
                     /mol_type="unassigned DNA"

  Query Match             1.4%;  Score 12.4;  DB 1;  Length 15;
  Best Local Similarity   92.9%;  Pred. No. 94;
  Matches   13;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        703 ATTTGTATAGTTTT 716
              ||||| ||||||||
Db         15 ATTTGGATAGTTTT 2


RESULT 129
AX085048
LOCUS       AX085048                15 bp    DNA     linear   PAT 09-MAR-2001
DEFINITION  Sequence 225 from Patent WO0113117.
ACCESSION   AX085048
VERSION     AX085048.1  GI:13275196
KEYWORDS    .
SOURCE      synthetic construct
  ORGANISM  synthetic construct
            other sequences; artificial sequences.
REFERENCE   1
  AUTHORS   Herath,H.M.
  TITLE     Proteins, genes and their use for diagnosis and treatment of breast
            cancer
  JOURNAL   Patent: WO 0113117-A 225 22-FEB-2001;
            Oxford GlycoSciences (UK) Limited (GB)
FEATURES             Location/Qualifiers
     source          1. .15
                     /organism="synthetic construct"
                     /mol_type="unassigned DNA"
                     /db_xref="taxon:32630"
                     /note="Probe"

  Query Match             1.4%;  Score 12.4;  DB 1;  Length 15;
  Best Local Similarity   92.9%;  Pred. No. 94;
  Matches   13;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy         84 GCGTGCTGAAGGGC 97
              |||||||| |||||
Db          2 GCGTGCTGCAGGGC 15


RESULT 130
CQ828340/c
LOCUS       CQ828340                14 bp    DNA     linear   PAT 05-JUL-2004
DEFINITION  Sequence 58 from Patent WO2004053120.
ACCESSION   CQ828340
VERSION     CQ828340.1  GI:49731823
KEYWORDS    .
SOURCE      Rattus norvegicus (Norway rat)
  ORGANISM  Rattus norvegicus
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae;
            Rattus.
REFERENCE   1
  AUTHORS   Weihe,E., Bieller,A. and Schaefer,M.K.
  TITLE     Regulatory elements in the 5' region of the vr1 gene
  JOURNAL   Patent: WO 2004053120-A 58 24-JUN-2004;
            Gruenenthal GmbH (DE)
FEATURES             Location/Qualifiers
     source          1. .14
                     /organism="Rattus norvegicus"
                     /mol_type="unassigned DNA"
                     /db_xref="taxon:10116"
                     /note="V$CEBPB 01"

  Query Match             1.4%;  Score 12;  DB 1;  Length 14;
  Best Local Similarity   100.0%;  Pred. No. 95;
  Matches   12;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        396 ATTGCATCATTG 407
              ||||||||||||
Db         12 ATTGCATCATTG 1


RESULT 131
AR133678/c
LOCUS       AR133678                15 bp    DNA     linear   PAT 16-MAY-2001
DEFINITION  Sequence 2103 from patent US 6194150.
ACCESSION   AR133678
VERSION     AR133678.1  GI:14122583
KEYWORDS    .
SOURCE      Unknown.
  ORGANISM  Unknown.
            Unclassified.
REFERENCE   1  (bases 1 to 15)
  AUTHORS   Stinchcomb,D.T., Jarvis,T. and McSwiggen,J.
  TITLE     Nucleic acid based inhibition of CD40
  JOURNAL   Patent: US 6194150-A 2103 27-FEB-2001;
FEATURES             Location/Qualifiers
     source          1. .15
                     /organism="unknown"
                     /mol_type="unassigned DNA"

  Query Match             1.4%;  Score 12;  DB 1;  Length 15;
  Best Local Similarity   100.0%;  Pred. No. 1e+02;
  Matches   12;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        431 AAAGCAGATGAC 442
              ||||||||||||
Db         14 AAAGCAGATGAC 3


RESULT 132
I39110
LOCUS       I39110                  15 bp    DNA     linear   PAT 13-MAY-1997
DEFINITION  Sequence 148 from patent US 5616488.
ACCESSION   I39110
VERSION     I39110.1  GI:2083590
KEYWORDS    .
SOURCE      Unknown.
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  ORGANISM  Unknown.
            Unclassified.
REFERENCE   1  (bases 1 to 15)
  AUTHORS   Sullivan,S., Draper,K.G., McSwiggen,J. and Stinchcomb,D.T.
  TITLE     IL-5 targeted ribozymes
  JOURNAL   Patent: US 5616488-A 148 01-APR-1997;
FEATURES             Location/Qualifiers
     source          1. .15
                     /organism="unknown"
                     /mol_type="unassigned DNA"

  Query Match             1.4%;  Score 12;  DB 1;  Length 15;
  Best Local Similarity   100.0%;  Pred. No. 1e+02;
  Matches   12;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        730 AAAATGTCTGTT 741
              ||||||||||||
Db          1 AAAATGTCTGTT 12


RESULT 133
I80907/c
LOCUS       I80907                   15 bp    DNA     linear   PAT 10-JUN-1998
DEFINITION  Sequence 24 from patent US 5709997.
ACCESSION   I80907
VERSION     I80907.1  GI:3209197
KEYWORDS    .
SOURCE      Unknown.
  ORGANISM  Unknown.
            Unclassified.
REFERENCE   1  (bases 1 to 15)
  AUTHORS   Marshall,R.L., Jou,C., Simons,J.N., Leary,T.P., Muerhoff,A.Scott.,
            Desai,S.M. and Mushahwar,I.K.
  TITLE     Nucleic acid detection of hepatitis GB virus
  JOURNAL   Patent: US 5709997-A 24 20-JAN-1998;
FEATURES             Location/Qualifiers
     source          1. .15
                     /organism="unknown"
                     /mol_type="unassigned DNA"

  Query Match             1.4%;  Score 12;  DB 1;  Length 15;
  Best Local Similarity   100.0%;  Pred. No. 1e+02;
  Matches   12;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy         90 TGAAGGGCGACG 101
              ||||||||||||
Db         13 TGAAGGGCGACG 2


RESULT 134
AX377090
LOCUS       AX377090                 15 bp    DNA     linear   PAT 18-MAR-2002
DEFINITION  Sequence 11 from Patent WO0212561.
ACCESSION   AX377090
VERSION     AX377090.1  GI:19573381
KEYWORDS    .
SOURCE      Homo sapiens (human)
  ORGANISM  Homo sapiens
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE   1
  AUTHORS   Kazemi,A., Messer,C. and Tanguay,D.A.
  TITLE     Haplotypes of the or1g1 gene
  JOURNAL   Patent: WO 0212561-A 11 14-FEB-2002;
            Genaissance Pharmaceuticals, Inc. (US)
FEATURES             Location/Qualifiers
     source          1. .15
                     /organism="Homo sapiens"
                     /mol_type="unassigned DNA"
                     /db_xref="taxon:9606"

  Query Match             1.4%;  Score 12;  DB 1;  Length 15;
  Best Local Similarity   85.7%;  Pred. No. 1e+02;
  Matches   12;  Conservative    1;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        611 AACACTGTAATCTT 624
              |||||||:|||  ||
Db          1 AACACTGKAATATT 14


RESULT 135
AX635353
LOCUS       AX635353                 15 bp    RNA     linear   PAT 21-FEB-2003
DEFINITION  Sequence 2492 from Patent EP1260586.
ACCESSION   AX635353
VERSION     AX635353.1  GI:28470967
KEYWORDS    .
SOURCE      unidentified
  ORGANISM  unidentified
            unclassified.
REFERENCE   1
  AUTHORS   Stinchcomb,D.T., Dudycz,L.W., Chowrira,B., Grimm,S., Direnzo,A.,
            Karpeisky,A., Draper,K.G., Kisich,K., Matulic-Adamic,J.,
            Mcswiggen,J.A., Modak,A., Pavco,P., Beigelman,L., Sullivan,S.M.,
            Sweedler,D., Thompson,J.D., Tracz,D., Usman,N., Wincott,F.E. and
            Woolf,T.
  TITLE     Method and reagent for inhibiting the expression of disease related
            genes
  JOURNAL   Patent: EP 1260586-A 2492 27-NOV-2002;
            RIBOZYME PHARMACEUTICALS, INC. (US)
FEATURES             Location/Qualifiers
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                     /db_xref="taxon:32644"

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Search completed: April 14, 2005, 16:42:55
Job time : 1 secs
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PN   WO2003000707-A2.
XX
PD   03-JAN-2003.
XX
PF   19-JUN-2002; 2002WO-US019664.
XX
PR   21-JUN-2001; 2001US-00888360.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Bennett FC,  Dobie K;
XX
DR   WPI; 2003-184032/18.
XX
PT   Novel antisense compounds targeted to nucleic acids encoding human
PT   superoxide dismutase 1, for modulating expression of the dismutase and
PT   treating diseases or conditions, e.g. amyotrophic lateral sclerosis.
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CC   from aberrant apoptosis and a hyperproliferative disorder. It may also be
CC   used in diagnostics, therapeutics and as a research reagent, e.g.
CC   prophylactically to prevent or delay infection, inflammation or tumour
CC   formation. Sequences given in records ACC40880-ACC40957 represent human
CC   superoxide dismutase 1 antisense inhibitor oligonucleotides
XX
SQ   Sequence 20 BP; 8 A; 4 C; 2 G; 6 T; 0 U; 0 Other;

  Query Match             2.3%;  Score 20;  DB 1;  Length 20;
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Db         20 ATCACTTGGAAGATTTGTAT 1


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ID   ACC40943 standard; DNA; 20 BP.
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AC   ACC40943;
XX
DT   23-MAY-2003  (first entry)
XX
DE   Human superoxide dismutase 1 antisense inhibitor # ISIS 150497.
XX
KW   Human; superoxide dismutase 1; antisense; neuroprotective; cytostatic;
KW   antiinflammatory; amyotrophic lateral sclerosis; apoptosis;
KW   hyperproliferative disorder; therapy; infection; inflammation; tumour;
KW   ss.
XX
OS   Homo sapiens.
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   modified_base   1. .20
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FT                   /note= "Phosphorothioate linkages. All cytosines are 5-
FT                   methylcytosine"
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FT   modified_base   16. .20
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XX
PN   WO2003000707-A2.
XX
PD   03-JAN-2003.
XX
PF   19-JUN-2002; 2002WO-US019664.
XX
PR   21-JUN-2001; 2001US-00888360.
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PI   Bennett FC,  Dobie K;
XX
DR   WPI; 2003-184032/18.
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XX
SQ   Sequence 20 BP; 8 A; 3 C; 1 G; 8 T; 0 U; 0 Other;

  Query Match             2.3%;  Score 20;  DB 1;  Length 20;
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Db         20 TTATTATGAGGCTATTAAAA 1


RESULT 56
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ID   ACC40883 standard; DNA; 20 BP.
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AC   ACC40883;
XX
DT   23-MAY-2003  (first entry)
XX
DE   Human superoxide dismutase 1 antisense inhibitor # ISIS 150437.
XX
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KW   Human; superoxide dismutase 1; antisense; neuroprotective; cytostatic;
KW   antiinflammatory; amyotrophic lateral sclerosis; apoptosis;
KW   hyperproliferative disorder; therapy; infection; inflammation; tumour;
KW   ss.
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OS   Homo sapiens.
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
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FT                   methylcytosine"
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FT                   /*tag= b
FT                   /mod_base= OTHER
FT                   /note= "2'-methoxyethyl (2'-MOE) nucleotides"
FT   modified_base   16. .20
FT                   /*tag=  c
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XX
PN   WO2003000707-A2.
XX
PD   03-JAN-2003.
XX
PF   19-JUN-2002; 2002WO-US019664.
XX
PR   21-JUN-2001; 2001US-00888360.
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PI   Bennett FC,  Dobie K;
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DR   WPI; 2003-184032/18.
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CC   formation. Sequences given in records ACC40880-ACC40957 represent human
CC   superoxide dismutase 1 antisense inhibitor oligonucleotides
XX
SQ   Sequence 20 BP; 7 A; 6 C; 6 G; 1 T; 0 U; 0 Other;

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Db         20 GGTTTCCGTTGCAGTCCTCG 1
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RESULT 57
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ID   ACC40887 standard; DNA; 20 BP.
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AC   ACC40887;
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DT   23-MAY-2003  (first entry)
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DE   Human superoxide dismutase 1 antisense inhibitor # ISIS 150441.
XX
KW   Human; superoxide dismutase 1; antisense; neuroprotective; cytostatic;
KW   antiinflammatory; amyotrophic lateral sclerosis; apoptosis;
KW   hyperproliferative disorder; therapy; infection; inflammation; tumour;
KW   ss.
XX
OS   Homo sapiens.
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   modified_base   1. .20
FT                   /*tag=  a
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FT                   methylcytosine"
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XX
PN   WO2003000707-A2.
XX
PD   03-JAN-2003.
XX
PF   19-JUN-2002; 2002WO-US019664.
XX
PR   21-JUN-2001; 2001US-00888360.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Bennett FC,  Dobie K;
XX
DR   WPI; 2003-184032/18.
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CC   formation. Sequences given in records ACC40880-ACC40957 represent human
CC   superoxide dismutase 1 antisense inhibitor oligonucleotides
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XX
SQ   Sequence 20 BP; 3 A; 7 C; 7 G; 3 T; 0 U; 0 Other;

  Query Match             2.3%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 60;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

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Db         20 CAGGACCTCGGCGTGGCCTA 1


RESULT 58
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ID   ACC40896 standard; DNA; 20 BP.
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AC   ACC40896;
XX
DT   23-MAY-2003  (first entry)
XX
DE   Human superoxide dismutase 1 antisense inhibitor # ISIS 150450.
XX
KW   Human; superoxide dismutase 1; antisense; neuroprotective; cytostatic;
KW   antiinflammatory; amyotrophic lateral sclerosis; apoptosis;
KW   hyperproliferative disorder; therapy; infection; inflammation; tumour;
KW   ss.
XX
OS   Homo sapiens.
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   modified_base   1. .20
FT                   /*tag=  a
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FT                   methylcytosine"
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XX
PN   WO2003000707-A2.
XX
PD   03-JAN-2003.
XX
PF   19-JUN-2002; 2002WO-US019664.
XX
PR   21-JUN-2001; 2001US-00888360.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Bennett FC,  Dobie K;
XX
DR   WPI; 2003-184032/18.
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XX
SQ   Sequence 20 BP; 3 A; 7 C; 4 G; 6 T; 0 U; 0 Other;

  Query Match             2.3%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 60;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

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RESULT 59
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ID   ACC40899 standard; DNA; 20 BP.
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AC   ACC40899;
XX
DT   23-MAY-2003  (first entry)
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XX
KW   Human; superoxide dismutase 1; antisense; neuroprotective; cytostatic;
KW   antiinflammatory; amyotrophic lateral sclerosis; apoptosis;
KW   hyperproliferative disorder; therapy; infection; inflammation; tumour;
KW   ss.
XX
OS   Homo sapiens.
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
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FT                   methylcytosine"
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PN   WO2003000707-A2.
XX
PD   03-JAN-2003.
XX
PF   19-JUN-2002; 2002WO-US019664.
XX
PR   21-JUN-2001; 2001US-00888360.
XX
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XX
PI   Bennett FC,  Dobie K;
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DR   WPI; 2003-184032/18.
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  Query Match             2.3%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 60;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

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RESULT 60
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ID   ACC40928 standard; DNA; 20 BP.
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AC   ACC40928;
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DT   23-MAY-2003  (first entry)
XX
DE   Human superoxide dismutase 1 antisense inhibitor # ISIS 150482.
XX
KW   Human; superoxide dismutase 1; antisense; neuroprotective; cytostatic;
KW   antiinflammatory; amyotrophic lateral sclerosis; apoptosis;
KW   hyperproliferative disorder; therapy; infection; inflammation; tumour;
KW   ss.
XX
OS   Homo sapiens.
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   modified_base    1. .20
FT                    /*tag=  a
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FT                    /note= "Phosphorothioate linkages. All cytosines are 5-
FT                    methylcytosine"
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FT                    /note= "2'-methoxyethyl (2'-MOE) nucleotides"
FT   modified_base    16. .20
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XX
PN   WO2003000707-A2.
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PD   03-JAN-2003.
XX
PF   19-JUN-2002; 2002WO-US019664.
XX
PR   21-JUN-2001; 2001US-00888360.
XX
PA   (ISIS-) ISIS PHARM INC.
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Qy        769 AATCACAGATGGGTATTAAA 788
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Db         20 AATCACAGATGGGTATTAAA 1


RESULT 61
ACC40944/c
ID   ACC40944 standard; DNA; 20 BP.
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AC   ACC40944;
XX
DT   23-MAY-2003  (first entry)
XX
DE   Human superoxide dismutase 1 antisense inhibitor # ISIS 150498.
XX
KW   Human; superoxide dismutase 1; antisense; neuroprotective; cytostatic;
KW   antiinflammatory; amyotrophic lateral sclerosis; apoptosis;
KW   hyperproliferative disorder; therapy; infection; inflammation; tumour;
KW   ss.
XX
OS   Homo sapiens.
OS   Synthetic.
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FH   Key             Location/Qualifiers
FT   modified_base    1. .20
FT                    /*tag=  a
FT                    /mod_base= OTHER
FT                    /note= "Phosphorothioate linkages. All cytosines are 5-
FT                    methylcytosine"
FT   modified_base    1. .5
FT                    /*tag=  b
FT                    /mod_base= OTHER
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FT   modified_base   16. .20
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PN   WO2003000707-A2.
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PD   03-JAN-2003.
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XX
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CC   oligonucleotides having 2'-methoxyethyl (2'-MOE) wings and a deoxy gap.
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CC   human superoxide dismutase 1 in human cells or tissues, and for treating
CC   a disease or condition associated with this enzyme (antisense therapy),
CC   especially amyotrophic lateral sclerosis, a disease or condition arising
CC   from aberrant apoptosis and a hyperproliferative disorder. It may also be
CC   used in diagnostics, therapeutics and as a research reagent, e.g.
CC   prophylactically to prevent or delay infection, inflammation or tumour
CC   formation. Sequences given in records ACC40880-ACC40957 represent human
CC   superoxide dismutase 1 antisense inhibitor oligonucleotides
XX
SQ   Sequence 20 BP; 5 A; 4 C; 3 G; 8 T; 0 U; 0 Other;

  Query Match             2.3%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 60;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        849 TGAGGCTATTAAAAGAATCC 868
              ||||||||||||||||||||
Db         20 TGAGGCTATTAAAAGAATCC 1


RESULT 62
ACC40884/c
ID   ACC40884 standard; DNA; 20 BP.
XX
AC   ACC40884;
XX
DT   23-MAY-2003  (first entry)
XX
DE   Human superoxide dismutase 1 antisense inhibitor # ISIS 150438.
XX
KW   Human; superoxide dismutase 1; antisense; neuroprotective; cytostatic;
KW   antiinflammatory; amyotrophic lateral sclerosis; apoptosis;
KW   hyperproliferative disorder; therapy; infection; inflammation; tumour;
KW   ss.
XX
OS   Homo sapiens.
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   modified_base   1. .20
FT                   /*tag=  a
FT                   /mod_base= OTHER
FT                   /note= "Phosphorothioate linkages. All cytosines are 5-
FT                   methylcytosine"
FT   modified_base   1. .5
FT                   /*tag=  b
FT                   /mod_base= OTHER
FT                   /note= "2'-methoxyethyl (2'-MOE) nucleotides"
FT   modified_base   16. .20
FT                   /*tag=  c
FT                   /mod_base= OTHER
FT                   /note= "2'-methoxyethyl (2'-MOE) nucleotides"
XX
PN   WO2003000707-A2.
XX
PD   03-JAN-2003.
XX
PF   19-JUN-2002; 2002WO-US019664.
XX
PR   21-JUN-2001; 2001US-00888360.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Bennett FC,  Dobie K;
XX
DR   WPI; 2003-184032/18.
XX
PT   Novel antisense compounds targeted to nucleic acids encoding human
PT   superoxide dismutase 1, for modulating expression of the dismutase and
PT   treating diseases or conditions, e.g. amyotrophic lateral sclerosis.
XX
PS   Claim 3; Page 76; 107pp; English.
XX
CC   The invention relates to a compound of 8-50 nucleobases in length,
CC   targeted to a nucleic acid molecule encoding human superoxide dismutase
CC   1. The compound specifically hybridises with and inhibits the expression
CC   of human superoxide dismutase 1 by hybridising with at least an 8-
CC   nucleobase portion of the nucleic acid molecule encoding the active site
CC   of the enzyme. The activity of compounds of the invention may be
CC   described as neuroprotective, cytostatic and antiinflammatory. The
CC   mechanism of action of compounds of the invention is antisense inhibition
CC   of human superoxide dismutase 1 expression by chimeric phosphorothioate
CC   oligonucleotides having 2'-methoxyethyl (2'-MOE) wings and a deoxy gap.
CC   Compounds of the invention are useful for inhibiting the expression of
CC   human superoxide dismutase 1 in human cells or tissues, and for treating
CC   a disease or condition associated with this enzyme (antisense therapy),
CC   especially amyotrophic lateral sclerosis, a disease or condition arising
CC   from aberrant apoptosis and a hyperproliferative disorder. It may also be
CC   used in diagnostics, therapeutics and as a research reagent, e.g.
CC   prophylactically to prevent or delay infection, inflammation or tumour
CC   formation. Sequences given in records ACC40880-ACC40957 represent human
CC   superoxide dismutase 1 antisense inhibitor oligonucleotides
XX
SQ   Sequence 20 BP; 4 A; 5 C; 8 G; 3 T; 0 U; 0 Other;

  Query Match             2.3%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 60;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy         19 CCGTTGCAGTCCTCGGAACC 38
              ||||||||||||||||||||
Db         20 CCGTTGCAGTCCTCGGAACC 1


RESULT 63
ACC40886/c
ID   ACC40886 standard; DNA; 20 BP.
XX
AC   ACC40886;
XX
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DT   23-MAY-2003  (first entry)
XX
DE   Human superoxide dismutase 1 antisense inhibitor # ISIS 150440.
XX
KW   Human; superoxide dismutase 1; antisense; neuroprotective; cytostatic;
KW   antiinflammatory; amyotrophic lateral sclerosis; apoptosis;
KW   hyperproliferative disorder; therapy; infection; inflammation; tumour;
KW   ss.
XX
OS   Homo sapiens.
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   modified_base   1. .20
FT                   /*tag=  a
FT                   /mod_base= OTHER
FT                   /note= "Phosphorothioate linkages. All cytosines are 5-
FT                   methylcytosine"
FT   modified_base   1. .5
FT                   /*tag=  b
FT                   /mod_base= OTHER
FT                   /note= "2'-methoxyethyl (2'-MOE) nucleotides"
FT   modified_base   16. .20
FT                   /*tag=  c
FT                   /mod_base= OTHER
FT                   /note= "2'-methoxyethyl (2'-MOE) nucleotides"
XX
PN   WO2003000707-A2.
XX
PD   03-JAN-2003.
XX
PF   19-JUN-2002; 2002WO-US019664.
XX
PR   21-JUN-2001; 2001US-00888360.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Bennett FC,  Dobie K;
XX
DR   WPI; 2003-184032/18.
XX
PT   Novel antisense compounds targeted to nucleic acids encoding human
PT   superoxide dismutase 1, for modulating expression of the dismutase and
PT   treating diseases or conditions, e.g. amyotrophic lateral sclerosis.
XX
PS   Example 15; Page 76; 107pp; English.
XX
CC   The invention relates to a compound of 8-50 nucleobases in length,
CC   targeted to a nucleic acid molecule encoding human superoxide dismutase
CC   1. The compound specifically hybridises with and inhibits the expression
CC   of human superoxide dismutase 1 by hybridising with at least an 8-
CC   nucleobase portion of the nucleic acid molecule encoding the active site
CC   of the enzyme. The activity of compounds of the invention may be
CC   described as neuroprotective, cytostatic and antiinflammatory. The
CC   mechanism of action of compounds of the invention is antisense inhibition
CC   of human superoxide dismutase 1 expression by chimeric phosphorothioate
CC   oligonucleotides having 2'-methoxyethyl (2'-MOE) wings and a deoxy gap.
CC   Compounds of the invention are useful for inhibiting the expression of
CC   human superoxide dismutase 1 in human cells or tissues, and for treating
CC   a disease or condition associated with this enzyme (antisense therapy),
CC   especially amyotrophic lateral sclerosis, a disease or condition arising
CC   from aberrant apoptosis and a hyperproliferative disorder. It may also be
CC   used in diagnostics, therapeutics and as a research reagent, e.g.
CC   prophylactically to prevent or delay infection, inflammation or tumour
CC   formation. Sequences given in records ACC40880-ACC40957 represent human
CC   superoxide dismutase 1 antisense inhibitor oligonucleotides
XX
SQ   Sequence 20 BP; 3 A; 5 C; 8 G; 4 T; 0 U; 0 Other;

  Query Match             2.3%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 60;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          27 GTCCTCGGAACCAGGACCTC 46
               ||||||||||||||||||||
Db          20 GTCCTCGGAACCAGGACCTC 1


RESULT 64
ACC40889/c
ID   ACC40889 standard; DNA; 20 BP.
XX
AC   ACC40889;
XX
DT   23-MAY-2003  (first entry)
XX
DE   Human superoxide dismutase 1 antisense inhibitor # ISIS 150443.
XX
KW   Human; superoxide dismutase 1; antisense; neuroprotective; cytostatic;
KW   antiinflammatory; amyotrophic lateral sclerosis; apoptosis;
KW   hyperproliferative disorder; therapy; infection; inflammation; tumour;
KW   ss.
XX
OS   Homo sapiens.
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   modified_base   1. .20
FT                   /*tag=  a
FT                   /mod_base= OTHER
FT                   /note= "Phosphorothioate linkages. All cytosines are 5-
FT                   methylcytosine"
FT   modified_base   1. .5
FT                   /*tag=  b
FT                   /mod_base= OTHER
FT                   /note= "2'-methoxyethyl (2'-MOE) nucleotides"
FT   modified_base   16. .20
FT                   /*tag=  c
FT                   /mod_base= OTHER
FT                   /note= "2'-methoxyethyl (2'-MOE) nucleotides"
XX
PN   WO2003000707-A2.
XX
PD   03-JAN-2003.
XX
PF   19-JUN-2002; 2002WO-US019664.
XX
PR   21-JUN-2001; 2001US-00888360.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Bennett FC,  Dobie K;
XX
DR   WPI; 2003-184032/18.
XX
PT   Novel antisense compounds targeted to nucleic acids encoding human
PT   superoxide dismutase 1, for modulating expression of the dismutase and
PT   treating diseases or conditions, e.g. amyotrophic lateral sclerosis.
XX
PS   Claim 3; Page 76; 107pp; English.
XX
CC   The invention relates to a compound of 8-50 nucleobases in length,
CC   targeted to a nucleic acid molecule encoding human superoxide dismutase
CC   1. The compound specifically hybridises with and inhibits the expression
CC   of human superoxide dismutase 1 by hybridising with at least an 8-
CC   nucleobase portion of the nucleic acid molecule encoding the active site
CC   of the enzyme. The activity of compounds of the invention may be
CC   described as neuroprotective, cytostatic and antiinflammatory. The
CC   mechanism of action of compounds of the invention is antisense inhibition
CC   of human superoxide dismutase 1 expression by chimeric phosphorothioate
CC   oligonucleotides having 2'-methoxyethyl (2'-MOE) wings and a deoxy gap.
CC   Compounds of the invention are useful for inhibiting the expression of
CC   human superoxide dismutase 1 in human cells or tissues, and for treating
CC   a disease or condition associated with this enzyme (antisense therapy),
CC   especially amyotrophic lateral sclerosis, a disease or condition arising
CC   from aberrant apoptosis and a hyperproliferative disorder. It may also be
```

```
CC   used in diagnostics, therapeutics and as a research reagent, e.g.
CC   prophylactically to prevent or delay infection, inflammation or tumour
CC   formation. Sequences given in records ACC40880-ACC40957 represent human
CC   superoxide dismutase 1 antisense inhibitor oligonucleotides
XX
SQ   Sequence 20 BP; 1 A; 9 C; 7 G; 3 T; 0 U; 0 Other;

  Query Match             2.3%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 60;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy         96 GCGACGGCCCAGTGCAGGGC 115
              ||||||||||||||||||||
Db         20 GCGACGGCCCAGTGCAGGGC 1


RESULT 65
ACC40894/c
ID   ACC40894 standard; DNA; 20 BP.
XX
AC   ACC40894;
XX
DT   23-MAY-2003  (first entry)
XX
DE   Human superoxide dismutase 1 antisense inhibitor # ISIS 150448.
XX
KW   Human; superoxide dismutase 1; antisense; neuroprotective; cytostatic;
KW   antiinflammatory; amyotrophic lateral sclerosis; apoptosis;
KW   hyperproliferative disorder; therapy; infection; inflammation; tumour;
KW   ss.
XX
OS   Homo sapiens.
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   modified_base   1. .20
FT                   /*tag=  a
FT                   /mod_base= OTHER
FT                   /note= "Phosphorothioate linkages. All cytosines are 5-
FT                   methylcytosine"
FT   modified_base   1. .5
FT                   /*tag=  b
FT                   /mod_base= OTHER
FT                   /note= "2'-methoxyethyl (2'-MOE) nucleotides"
FT   modified_base   16. .20
FT                   /*tag=  c
FT                   /mod_base= OTHER
FT                   /note= "2'-methoxyethyl (2'-MOE) nucleotides"
XX
PN   WO2003000707-A2.
XX
PD   03-JAN-2003.
XX
PF   19-JUN-2002; 2002WO-US019664.
XX
PR   21-JUN-2001; 2001US-00888360.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Bennett FC,  Dobie K;
XX
DR   WPI; 2003-184032/18.
XX
PT   Novel antisense compounds targeted to nucleic acids encoding human
PT   superoxide dismutase 1, for modulating expression of the dismutase and
PT   treating diseases or conditions, e.g. amyotrophic lateral sclerosis.
XX
PS   Claim 3; Page 76; 107pp; English.
XX
CC   The invention relates to a compound of 8-50 nucleobases in length,
CC   targeted to a nucleic acid molecule encoding human superoxide dismutase
CC   1. The compound specifically hybridises with and inhibits the expression
CC   of human superoxide dismutase 1 by hybridising with at least an 8-
CC   nucleobase portion of the nucleic acid molecule encoding the active site
CC   of the enzyme. The activity of compounds of the invention may be
CC   described as neuroprotective, cytostatic and antiinflammatory. The
CC   mechanism of action of compounds of the invention is antisense inhibition
CC   of human superoxide dismutase 1 expression by chimeric phosphorothioate
CC   oligonucleotides having 2'-methoxyethyl (2'-MOE) wings and a deoxy gap.
CC   Compounds of the invention are useful for inhibiting the expression of
CC   human superoxide dismutase 1 in human cells or tissues, and for treating
CC   a disease or condition associated with this enzyme (antisense therapy),
CC   especially amyotrophic lateral sclerosis, a disease or condition arising
CC   from aberrant apoptosis and a hyperproliferative disorder. It may also be
CC   used in diagnostics, therapeutics and as a research reagent, e.g.
CC   prophylactically to prevent or delay infection, inflammation or tumour
CC   formation. Sequences given in records ACC40880-ACC40957 represent human
CC   superoxide dismutase 1 antisense inhibitor oligonucleotides
XX
SQ   Sequence 20 BP; 4 A; 7 C; 2 G; 7 T; 0 U; 0 Other;

  Query Match             2.3%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 60;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        161 TGGGGAAGCATTAAAGGACT 180
              ||||||||||||||||||||
Db         20 TGGGGAAGCATTAAAGGACT 1


RESULT 66
ACC40931/c
ID   ACC40931 standard; DNA; 20 BP.
XX
AC   ACC40931;
XX
DT   23-MAY-2003  (first entry)
XX
DE   Human superoxide dismutase 1 antisense inhibitor # ISIS 150485.
XX
KW   Human; superoxide dismutase 1; antisense; neuroprotective; cytostatic;
KW   antiinflammatory; amyotrophic lateral sclerosis; apoptosis;
KW   hyperproliferative disorder; therapy; infection; inflammation; tumour;
KW   ss.
XX
OS   Homo sapiens.
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   modified_base   1. .20
FT                   /*tag=  a
FT                   /mod_base= OTHER
FT                   /note= "Phosphorothioate linkages. All cytosines are 5-
FT                   methylcytosine"
FT   modified_base   1. .5
FT                   /*tag=  b
FT                   /mod_base= OTHER
FT                   /note= "2'-methoxyethyl (2'-MOE) nucleotides"
FT   modified_base   16. .20
FT                   /*tag=  c
FT                   /mod_base= OTHER
FT                   /note= "2'-methoxyethyl (2'-MOE) nucleotides"
XX
PN   WO2003000707-A2.
XX
PD   03-JAN-2003.
XX
PF   19-JUN-2002; 2002WO-US019664.
XX
PR   21-JUN-2001; 2001US-00888360.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Bennett FC,  Dobie K;
XX
DR   WPI; 2003-184032/18.
```

```
XX
PT   Novel antisense compounds targeted to nucleic acids encoding human
PT   superoxide dismutase 1, for modulating expression of the dismutase and
PT   treating diseases or conditions, e.g. amyotrophic lateral sclerosis.
XX
PS   Example 15; Page 77; 107pp; English.
XX
CC   The invention relates to a compound of 8-50 nucleobases in length,
CC   targeted to a nucleic acid molecule encoding human superoxide dismutase
CC   1. The compound specifically hybridises with and inhibits the expression
CC   of human superoxide dismutase 1 by hybridising with at least an 8-
CC   nucleobase portion of the nucleic acid molecule encoding the active site
CC   of the enzyme. The activity of compounds of the invention may be
CC   described as neuroprotective, cytostatic and antiinflammatory. The
CC   mechanism of action of compounds of the invention is antisense inhibition
CC   of human superoxide dismutase 1 expression by chimeric phosphorothioate
CC   oligonucleotides having 2'-methoxyethyl (2'-MOE) wings and a deoxy gap.
CC   Compounds of the invention are useful for inhibiting the expression of
CC   human superoxide dismutase 1 in human cells or tissues, and for treating
CC   a disease or condition associated with this enzyme (antisense therapy),
CC   especially amyotrophic lateral sclerosis, a disease or condition arising
CC   from aberrant apoptosis and a hyperproliferative disorder. It may also be
CC   used in diagnostics, therapeutics and as a research reagent, e.g.
CC   prophylactically to prevent or delay infection, inflammation or tumour
CC   formation. Sequences given in records ACC40880-ACC40957 represent human
CC   superoxide dismutase 1 antisense inhibitor oligonucleotides
XX
SQ   Sequence 20 BP; 9 A; 2 C; 3 G; 6 T; 0 U; 0 Other;

  Query Match             2.3%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 60;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        795 AGAATTTCTTTGTCATTCAA 814
              ||||||||||||||||||||
Db         20 AGAATTTCTTTGTCATTCAA 1


RESULT 67
ACC40937/c
ID   ACC40937 standard; DNA; 20 BP.
XX
AC   ACC40937;
XX
DT   23-MAY-2003  (first entry)
XX
DE   Human superoxide dismutase 1 antisense inhibitor # ISIS 150491.
XX
KW   Human; superoxide dismutase 1; antisense; neuroprotective; cytostatic;
KW   antiinflammatory; amyotrophic lateral sclerosis; apoptosis;
KW   hyperproliferative disorder; therapy; infection; inflammation; tumour;
KW   ss.
XX
OS   Homo sapiens.
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   modified_base    1. .20
FT                    /*tag=  a
FT                    /mod_base= OTHER
FT                    /note= "Phosphorothioate linkages. All cytosines are 5-
FT                    methylcytosine"
FT   modified_base    1. .5
FT                    /*tag=  b
FT                    /mod_base= OTHER
FT                    /note= "2'-methoxyethyl (2'-MOE) nucleotides"
FT   modified_base    16. .20
FT                    /*tag=  c
FT                    /mod_base= OTHER
FT                    /note= "2'-methoxyethyl (2'-MOE) nucleotides"
XX
PN   WO2003000707-A2.
XX
PD   03-JAN-2003.
XX
PF   19-JUN-2002; 2002WO-US019664.
XX
PR   21-JUN-2001; 2001US-00888360.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Bennett FC,  Dobie K;
XX
DR   WPI; 2003-184032/18.
XX
PT   Novel antisense compounds targeted to nucleic acids encoding human
PT   superoxide dismutase 1, for modulating expression of the dismutase and
PT   treating diseases or conditions, e.g. amyotrophic lateral sclerosis.
XX
PS   Example 15; Page 77; 107pp; English.
XX
CC   The invention relates to a compound of 8-50 nucleobases in length,
CC   targeted to a nucleic acid molecule encoding human superoxide dismutase
CC   1. The compound specifically hybridises with and inhibits the expression
CC   of human superoxide dismutase 1 by hybridising with at least an 8-
CC   nucleobase portion of the nucleic acid molecule encoding the active site
CC   of the enzyme. The activity of compounds of the invention may be
CC   described as neuroprotective, cytostatic and antiinflammatory. The
CC   mechanism of action of compounds of the invention is antisense inhibition
CC   of human superoxide dismutase 1 expression by chimeric phosphorothioate
CC   oligonucleotides having 2'-methoxyethyl (2'-MOE) wings and a deoxy gap.
CC   Compounds of the invention are useful for inhibiting the expression of
CC   human superoxide dismutase 1 in human cells or tissues, and for treating
CC   a disease or condition associated with this enzyme (antisense therapy),
CC   especially amyotrophic lateral sclerosis, a disease or condition arising
CC   from aberrant apoptosis and a hyperproliferative disorder. It may also be
CC   used in diagnostics, therapeutics and as a research reagent, e.g.
CC   prophylactically to prevent or delay infection, inflammation or tumour
CC   formation. Sequences given in records ACC40880-ACC40957 represent human
CC   superoxide dismutase 1 antisense inhibitor oligonucleotides
XX
SQ   Sequence 20 BP; 5 A; 4 C; 3 G; 8 T; 0 U; 0 Other;

  Query Match             2.3%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 60;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        820 TGAATAAAAACCCTGTATGG 839
              ||||||||||||||||||||
Db         20 TGAATAAAAACCCTGTATGG 1


RESULT 68
ACC40909/c
ID   ACC40909 standard; DNA; 20 BP.
XX
AC   ACC40909;
XX
DT   23-MAY-2003  (first entry)
XX
DE   Human superoxide dismutase 1 antisense inhibitor # ISIS 150463.
XX
KW   Human; superoxide dismutase 1; antisense; neuroprotective; cytostatic;
KW   antiinflammatory; amyotrophic lateral sclerosis; apoptosis;
KW   hyperproliferative disorder; therapy; infection; inflammation; tumour;
KW   ss.
XX
OS   Homo sapiens.
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   modified_base    1. .20
FT                    /*tag=  a
FT                    /mod_base= OTHER
FT                    /note= "Phosphorothioate linkages. All cytosines are 5-
FT                    methylcytosine"
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FT   modified_base   1. .5
FT                   /*tag=  b
FT                   /mod_base= OTHER
FT                   /note= "2'-methoxyethyl (2'-MOE) nucleotides"
FT   modified_base   16. .20
FT                   /*tag=  c
FT                   /mod_base= OTHER
FT                   /note= "2'-methoxyethyl (2'-MOE) nucleotides"
XX
PN   WO2003000707-A2.
XX
PD   03-JAN-2003.
XX
PF   19-JUN-2002; 2002WO-US019664.
XX
PR   21-JUN-2001; 2001US-00888360.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Bennett FC,  Dobie K;
XX
DR   WPI; 2003-184032/18.
XX
PT   Novel antisense compounds targeted to nucleic acids encoding human
PT   superoxide dismutase 1, for modulating expression of the dismutase and
PT   treating diseases or conditions, e.g. amyotrophic lateral sclerosis.
XX
PS   Claim 3; Page 77; 107pp; English.
XX
CC   The invention relates to a compound of 8-50 nucleobases in length,
CC   targeted to a nucleic acid molecule encoding human superoxide dismutase
CC   1. The compound specifically hybridises with and inhibits the expression
CC   of human superoxide dismutase 1 by hybridising with at least an 8-
CC   nucleobase portion of the nucleic acid molecule encoding the active site
CC   of the enzyme. The activity of compounds of the invention may be
CC   described as neuroprotective, cytostatic and antiinflammatory. The
CC   mechanism of action of compounds of the invention is antisense inhibition
CC   of human superoxide dismutase 1 expression by chimeric phosphorothioate
CC   oligonucleotides having 2'-methoxyethyl (2'-MOE) wings and a deoxy gap.
CC   Compounds of the invention are useful for inhibiting the expression of
CC   human superoxide dismutase 1 in human cells or tissues, and for treating
CC   a disease or condition associated with this enzyme (antisense therapy),
CC   especially amyotrophic lateral sclerosis, a disease or condition arising
CC   from aberrant apoptosis and a hyperproliferative disorder. It may also be
CC   used in diagnostics, therapeutics and as a research reagent, e.g.
CC   prophylactically to prevent or delay infection, inflammation or tumour
CC   formation. Sequences given in records ACC40880-ACC40957 represent human
CC   superoxide dismutase 1 antisense inhibitor oligonucleotides
XX
SQ   Sequence 20 BP; 6 A; 8 C; 3 G; 3 T; 0 U; 0 Other;

  Query Match             2.3%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 60;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        504 GTGGTGTAATTGGGATCGCC 523
              ||||||||||||||||||||
Db         20 GTGGTGTAATTGGGATCGCC 1


RESULT 69
ACC40942/c
ID   ACC40942 standard; DNA; 20 BP.
XX
AC   ACC40942;
XX
DT   23-MAY-2003  (first entry)
XX
DE   Human superoxide dismutase 1 antisense inhibitor # ISIS 150496.
XX
KW   Human; superoxide dismutase 1; antisense; neuroprotective; cytostatic;
KW   antiinflammatory; amyotrophic lateral sclerosis; apoptosis;
KW   hyperproliferative disorder; therapy; infection; inflammation; tumour;
KW   ss.
XX
OS   Homo sapiens.
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   modified_base   1. .20
FT                   /*tag=  a
FT                   /mod_base= OTHER
FT                   /note= "Phosphorothioate linkages. All cytosines are 5-
FT                   methylcytosine"
FT   modified_base   1. .5
FT                   /*tag=  b
FT                   /mod_base= OTHER
FT                   /note= "2'-methoxyethyl (2'-MOE) nucleotides"
FT   modified_base   16. .20
FT                   /*tag=  c
FT                   /mod_base= OTHER
FT                   /note= "2'-methoxyethyl (2'-MOE) nucleotides"
XX
PN   WO2003000707-A2.
XX
PD   03-JAN-2003.
XX
PF   19-JUN-2002; 2002WO-US019664.
XX
PR   21-JUN-2001; 2001US-00888360.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Bennett FC,  Dobie K;
XX
DR   WPI; 2003-184032/18.
XX
PT   Novel antisense compounds targeted to nucleic acids encoding human
PT   superoxide dismutase 1, for modulating expression of the dismutase and
PT   treating diseases or conditions, e.g. amyotrophic lateral sclerosis.
XX
PS   Example 15; Page 77; 107pp; English.
XX
CC   The invention relates to a compound of 8-50 nucleobases in length,
CC   targeted to a nucleic acid molecule encoding human superoxide dismutase
CC   1. The compound specifically hybridises with and inhibits the expression
CC   of human superoxide dismutase 1 by hybridising with at least an 8-
CC   nucleobase portion of the nucleic acid molecule encoding the active site
CC   of the enzyme. The activity of compounds of the invention may be
CC   described as neuroprotective, cytostatic and antiinflammatory. The
CC   mechanism of action of compounds of the invention is antisense inhibition
CC   of human superoxide dismutase 1 expression by chimeric phosphorothioate
CC   oligonucleotides having 2'-methoxyethyl (2'-MOE) wings and a deoxy gap.
CC   Compounds of the invention are useful for inhibiting the expression of
CC   human superoxide dismutase 1 in human cells or tissues, and for treating
CC   a disease or condition associated with this enzyme (antisense therapy),
CC   especially amyotrophic lateral sclerosis, a disease or condition arising
CC   from aberrant apoptosis and a hyperproliferative disorder. It may also be
CC   used in diagnostics, therapeutics and as a research reagent, e.g.
CC   prophylactically to prevent or delay infection, inflammation or tumour
CC   formation. Sequences given in records ACC40880-ACC40957 represent human
CC   superoxide dismutase 1 antisense inhibitor oligonucleotides
XX
SQ   Sequence 20 BP; 7 A; 5 C; 3 G; 5 T; 0 U; 0 Other;

  Query Match             2.3%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 60;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        835 TATGGCACTTATTATGAGGC 854
              ||||||||||||||||||||
Db         20 TATGGCACTTATTATGAGGC 1


RESULT 70
ACC40902/c
```

```
ID   ACC40902 standard; DNA; 20 BP.
XX
AC   ACC40902;
XX
DT   23-MAY-2003  (first entry)
XX
DE   Human superoxide dismutase 1 antisense inhibitor # ISIS 150456.
XX
KW   Human; superoxide dismutase 1; antisense; neuroprotective; cytostatic;
KW   antiinflammatory; amyotrophic lateral sclerosis; apoptosis;
KW   hyperproliferative disorder; therapy; infection; inflammation; tumour;
KW   ss.
XX
OS   Homo sapiens.
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   modified_base   1. .20
FT                   /*tag=  a
FT                   /mod_base= OTHER
FT                   /note= "Phosphorothioate linkages. All cytosines are 5-
FT                   methylcytosine"
FT   modified_base   1. .5
FT                   /*tag=  b
FT                   /mod_base= OTHER
FT                   /note= "2'-methoxyethyl (2'-MOE) nucleotides"
FT   modified_base   16. .20
FT                   /*tag=  c
FT                   /mod_base= OTHER
FT                   /note= "2'-methoxyethyl (2'-MOE) nucleotides"
XX
PN   WO2003000707-A2.
XX
PD   03-JAN-2003.
XX
PF   19-JUN-2002; 2002WO-US019664.
XX
PR   21-JUN-2001; 2001US-00888360.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Bennett FC,  Dobie K;
XX
DR   WPI; 2003-184032/18.
XX
PT   Novel antisense compounds targeted to nucleic acids encoding human
PT   superoxide dismutase 1, for modulating expression of the dismutase and
PT   treating diseases or conditions, e.g. amyotrophic lateral sclerosis.
XX
PS   Claim 3; Page 76; 107pp; English.
XX
CC   The invention relates to a compound of 8-50 nucleobases in length,
CC   targeted to a nucleic acid molecule encoding human superoxide dismutase
CC   1. The compound specifically hybridises with and inhibits the expression
CC   of human superoxide dismutase 1 by hybridising with at least an 8-
CC   nucleobase portion of the nucleic acid molecule encoding the active site
CC   of the enzyme. The activity of compounds of the invention may be
CC   described as neuroprotective, cytostatic and antiinflammatory. The
CC   mechanism of action of compounds of the invention is antisense inhibition
CC   of human superoxide dismutase 1 expression by chimeric phosphorothioate
CC   oligonucleotides having 2'-methoxyethyl (2'-MOE) wings and a deoxy gap.
CC   Compounds of the invention are useful for inhibiting the expression of
CC   human superoxide dismutase 1 in human cells or tissues, and for treating
CC   a disease or condition associated with this enzyme (antisense therapy),
CC   especially amyotrophic lateral sclerosis, a disease or condition arising
CC   from aberrant apoptosis and a hyperproliferative disorder. It may also be
CC   used in diagnostics, therapeutics and as a research reagent, e.g.
CC   prophylactically to prevent or delay infection, inflammation or tumour
CC   formation. Sequences given in records ACC40880-ACC40957 represent human
CC   superoxide dismutase 1 antisense inhibitor oligonucleotides
XX
SQ   Sequence 20 BP; 3 A; 8 C; 3 G; 6 T; 0 U; 0 Other;

  Query Match             2.3%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 60;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        335 GACAAAGATGGTGTGGCCGA 354
              ||||||||||||||||||||
Db         20 GACAAAGATGGTGTGGCCGA 1


RESULT 71
ACC40919/c
ID   ACC40919 standard; DNA; 20 BP.
XX
AC   ACC40919;
XX
DT   23-MAY-2003  (first entry)
XX
DE   Human superoxide dismutase 1 antisense inhibitor # ISIS 150473.
XX
KW   Human; superoxide dismutase 1; antisense; neuroprotective; cytostatic;
KW   antiinflammatory; amyotrophic lateral sclerosis; apoptosis;
KW   hyperproliferative disorder; therapy; infection; inflammation; tumour;
KW   ss.
XX
OS   Homo sapiens.
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   modified_base   1. .20
FT                   /*tag=  a
FT                   /mod_base= OTHER
FT                   /note= "Phosphorothioate linkages. All cytosines are 5-
FT                   methylcytosine"
FT   modified_base   1. .5
FT                   /*tag=  b
FT                   /mod_base= OTHER
FT                   /note= "2'-methoxyethyl (2'-MOE) nucleotides"
FT   modified_base   16. .20
FT                   /*tag=  c
FT                   /mod_base= OTHER
FT                   /note= "2'-methoxyethyl (2'-MOE) nucleotides"
XX
PN   WO2003000707-A2.
XX
PD   03-JAN-2003.
XX
PF   19-JUN-2002; 2002WO-US019664.
XX
PR   21-JUN-2001; 2001US-00888360.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Bennett FC,  Dobie K;
XX
DR   WPI; 2003-184032/18.
XX
PT   Novel antisense compounds targeted to nucleic acids encoding human
PT   superoxide dismutase 1, for modulating expression of the dismutase and
PT   treating diseases or conditions, e.g. amyotrophic lateral sclerosis.
XX
PS   Claim 3; Page 77; 107pp; English.
XX
CC   The invention relates to a compound of 8-50 nucleobases in length,
CC   targeted to a nucleic acid molecule encoding human superoxide dismutase
CC   1. The compound specifically hybridises with and inhibits the expression
CC   of human superoxide dismutase 1 by hybridising with at least an 8-
CC   nucleobase portion of the nucleic acid molecule encoding the active site
CC   of the enzyme. The activity of compounds of the invention may be
CC   described as neuroprotective, cytostatic and antiinflammatory. The
CC   mechanism of action of compounds of the invention is antisense inhibition
CC   of human superoxide dismutase 1 expression by chimeric phosphorothioate
CC   oligonucleotides having 2'-methoxyethyl (2'-MOE) wings and a deoxy gap.
CC   Compounds of the invention are useful for inhibiting the expression of
```

```
CC   human superoxide dismutase 1 in human cells or tissues, and for treating
CC   a disease or condition associated with this enzyme (antisense therapy),
CC   especially amyotrophic lateral sclerosis, a disease or condition arising
CC   from aberrant apoptosis and a hyperproliferative disorder. It may also be
CC   used in diagnostics, therapeutics and as a research reagent, e.g.
CC   prophylactically to prevent or delay infection, inflammation or tumour
CC   formation. Sequences given in records ACC40880-ACC40957 represent human
CC   superoxide dismutase 1 antisense inhibitor oligonucleotides
XX
SQ   Sequence 20 BP; 8 A; 4 C; 2 G; 6 T; 0 U; 0 Other;

  Query Match             2.3%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 60;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        686 TTATGATCACTTGGAAGATT 705
              ||||||||||||||||||||
Db         20 TTATGATCACTTGGAAGATT 1


RESULT 72
ACC40921/c
ID   ACC40921 standard; DNA; 20 BP.
XX
AC   ACC40921;
XX
DT   23-MAY-2003  (first entry)
XX
DE   Human superoxide dismutase 1 antisense inhibitor # ISIS 150475.
XX
KW   Human; superoxide dismutase 1; antisense; neuroprotective; cytostatic;
KW   antiinflammatory; amyotrophic lateral sclerosis; apoptosis;
KW   hyperproliferative disorder; therapy; infection; inflammation; tumour;
KW   ss.
XX
OS   Homo sapiens.
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   modified_base   1. .20
FT                   /*tag=  a
FT                   /mod_base= OTHER
FT                   /note= "Phosphorothioate linkages. All cytosines are 5-
FT                   methylcytosine"
FT   modified_base   1. .5
FT                   /*tag=  b
FT                   /mod_base= OTHER
FT                   /note= "2'-methoxyethyl (2'-MOE) nucleotides"
FT   modified_base   16. .20
FT                   /*tag=  c
FT                   /mod_base= OTHER
FT                   /note= "2'-methoxyethyl (2'-MOE) nucleotides"
XX
PN   WO2003000707-A2.
XX
PD   03-JAN-2003.
XX
PF   19-JUN-2002; 2002WO-US019664.
XX
PR   21-JUN-2001; 2001US-00888360.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Bennett FC,  Dobie K;
XX
DR   WPI; 2003-184032/18.
XX
PT   Novel antisense compounds targeted to nucleic acids encoding human
PT   superoxide dismutase 1, for modulating expression of the dismutase and
PT   treating diseases or conditions, e.g. amyotrophic lateral sclerosis.
XX
PS   Example 15; Page 77; 107pp; English.
XX
CC   The invention relates to a compound of 8-50 nucleobases in length,
CC   targeted to a nucleic acid molecule encoding human superoxide dismutase
CC   1. The compound specifically hybridises with and inhibits the expression
CC   of human superoxide dismutase 1 by hybridising with at least an 8-
CC   nucleobase portion of the nucleic acid molecule encoding the active site
CC   of the enzyme. The activity of compounds of the invention may be
CC   described as neuroprotective, cytostatic and antiinflammatory. The
CC   mechanism of action of compounds of the invention is antisense inhibition
CC   of human superoxide dismutase 1 expression by chimeric phosphorothioate
CC   oligonucleotides having 2'-methoxyethyl (2'-MOE) wings and a deoxy gap.
CC   Compounds of the invention are useful for inhibiting the expression of
CC   human superoxide dismutase 1 in human cells or tissues, and for treating
CC   a disease or condition associated with this enzyme (antisense therapy),
CC   especially amyotrophic lateral sclerosis, a disease or condition arising
CC   from aberrant apoptosis and a hyperproliferative disorder. It may also be
CC   used in diagnostics, therapeutics and as a research reagent, e.g.
CC   prophylactically to prevent or delay infection, inflammation or tumour
CC   formation. Sequences given in records ACC40880-ACC40957 represent human
CC   superoxide dismutase 1 antisense inhibitor oligonucleotides
XX
SQ   Sequence 20 BP; 8 A; 2 C; 2 G; 8 T; 0 U; 0 Other;

  Query Match             2.3%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 60;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        707 GTATAGTTTTATAAAACTCA 726
              ||||||||||||||||||||
Db         20 GTATAGTTTTATAAAACTCA 1


RESULT 73
ACC40885/c
ID   ACC40885 standard; DNA; 20 BP.
XX
AC   ACC40885;
XX
DT   23-MAY-2003  (first entry)
XX
DE   Human superoxide dismutase 1 antisense inhibitor # ISIS 150439.
XX
KW   Human; superoxide dismutase 1; antisense; neuroprotective; cytostatic;
KW   antiinflammatory; amyotrophic lateral sclerosis; apoptosis;
KW   hyperproliferative disorder; therapy; infection; inflammation; tumour;
KW   ss.
XX
OS   Homo sapiens.
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   modified_base   1. .20
FT                   /*tag=  a
FT                   /mod_base= OTHER
FT                   /note= "Phosphorothioate linkages. All cytosines are 5-
FT                   methylcytosine"
FT   modified_base   1. .5
FT                   /*tag=  b
FT                   /mod_base= OTHER
FT                   /note= "2'-methoxyethyl (2'-MOE) nucleotides"
FT   modified_base   16. .20
FT                   /*tag=  c
FT                   /mod_base= OTHER
FT                   /note= "2'-methoxyethyl (2'-MOE) nucleotides"
XX
PN   WO2003000707-A2.
XX
PD   03-JAN-2003.
XX
PF   19-JUN-2002; 2002WO-US019664.
XX
PR   21-JUN-2001; 2001US-00888360.
XX
PA   (ISIS-) ISIS PHARM INC.
```

XX
PI Bennett FC, Dobie K;
XX
DR WPI; 2003-184032/18.
XX
PT Novel antisense compounds targeted to nucleic acids encoding human
PT superoxide dismutase 1, for modulating expression of the dismutase and
PT treating diseases or conditions, e.g. amyotrophic lateral sclerosis.
XX
PS Claim 3; Page 76; 107pp; English.
XX
CC The invention relates to a compound of 8-50 nucleobases in length,
CC targeted to a nucleic acid molecule encoding human superoxide dismutase
CC 1. The compound specifically hybridises with and inhibits the expression
CC of human superoxide dismutase 1 by hybridising with at least an 8-
CC nucleobase portion of the nucleic acid molecule encoding the active site
CC of the enzyme. The activity of compounds of the invention may be
CC described as neuroprotective, cytostatic and antiinflammatory. The
CC mechanism of action of compounds of the invention is antisense inhibition
CC of human superoxide dismutase 1 expression by chimeric phosphorothioate
CC oligonucleotides having 2'-methoxyethyl (2'-MOE) wings and a deoxy gap.
CC Compounds of the invention are useful for inhibiting the expression of
CC human superoxide dismutase 1 in human cells or tissues, and for treating
CC a disease or condition associated with this enzyme (antisense therapy),
CC especially amyotrophic lateral sclerosis, a disease or condition arising
CC from aberrant apoptosis and a hyperproliferative disorder. It may also be
CC used in diagnostics, therapeutics and as a research reagent, e.g.
CC prophylactically to prevent or delay infection, inflammation or tumour
CC formation. Sequences given in records ACC40880-ACC40957 represent human
CC superoxide dismutase 1 antisense inhibitor oligonucleotides
XX
SQ Sequence 20 BP; 3 A; 6 C; 6 G; 5 T; 0 U; 0 Other;

Query Match 2.3%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 60;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 23 TGCAGTCCTCGGAACCAGGA 42
||||||||||||||||||||
Db 20 TGCAGTCCTCGGAACCAGGA 1

RESULT 74
ABZ79576
ID ABZ79576 standard; DNA; 20 BP.
XX
AC ABZ79576;
XX
DT 23-MAY-2003 (first entry)
XX
DE Human superoxide dismutase 1 forward primer sequence.
XX
KW Human; superoxide dismutase 1; antisense; neuroprotective; cytostatic;
KW antiinflammatory; amyotrophic lateral sclerosis; apoptosis;
KW hyperproliferative disorder; therapy; infection; inflammation; tumour;
KW PCR; primer; ss.
XX
OS Homo sapiens.
XX
PN WO2003000707-A2.
XX
PD 03-JAN-2003.
XX
PF 19-JUN-2002; 2002WO-US019664.
XX
PR 21-JUN-2001; 2001US-00888360.
XX
PA (ISIS-) ISIS PHARM INC.
XX
PI Bennett FC, Dobie K;
XX
DR WPI; 2003-184032/18.
XX
PT Novel antisense compounds targeted to nucleic acids encoding human
PT superoxide dismutase 1, for modulating expression of the dismutase and
PT treating diseases or conditions, e.g. amyotrophic lateral sclerosis.
XX
PS Example 13; Page 74; 107pp; English.
XX
CC The invention relates to a compound of 8-50 nucleobases in length,
CC targeted to a nucleic acid molecule encoding human superoxide dismutase
CC 1. The compound specifically hybridises with and inhibits the expression
CC of human superoxide dismutase 1 by hybridising with at least an 8-
CC nucleobase portion of the nucleic acid molecule encoding the active site
CC of the enzyme. The activity of compounds of the invention may be
CC described as neuroprotective, cytostatic and antiinflammatory. The
CC mechanism of action of compounds of the invention is antisense inhibition
CC of human superoxide dismutase 1 expression by chimeric phosphorothioate
CC oligonucleotides having 2'-methoxyethyl (2'-MOE) wings and a deoxy gap.
CC Compounds of the invention are useful for inhibiting the expression of
CC human superoxide dismutase 1 in human cells or tissues, and for treating
CC a disease or condition associated with this enzyme (antisense therapy),
CC especially amyotrophic lateral sclerosis, a disease or condition arising
CC from aberrant apoptosis and a hyperproliferative disorder. It may also be
CC used in diagnostics, therapeutics and as a research reagent, e.g.
CC prophylactically to prevent or delay infection, inflammation or tumour
CC formation. The current sequence represents the human superoxide dismutase
CC 1 forward primer sequence
XX
SQ Sequence 20 BP; 3 A; 4 C; 8 G; 5 T; 0 U; 0 Other;

Query Match 2.3%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 60;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 49 CGTGGCCTAGCGAGTTATGG 68
||||||||||||||||||||
Db 1 CGTGGCCTAGCGAGTTATGG 20

RESULT 75
ABZ79577/c
ID ABZ79577 standard; DNA; 20 BP.
XX
AC ABZ79577;
XX
DT 23-MAY-2003 (first entry)
XX
DE Human superoxide dismutase 1 reverse primer sequence.
XX
KW Human; superoxide dismutase 1; antisense; neuroprotective; cytostatic;
KW antiinflammatory; amyotrophic lateral sclerosis; apoptosis;
KW hyperproliferative disorder; therapy; infection; inflammation; tumour;
KW PCR; primer; ss.
XX
OS Homo sapiens.
XX
PN WO2003000707-A2.
XX
PD 03-JAN-2003.
XX
PF 19-JUN-2002; 2002WO-US019664.
XX
PR 21-JUN-2001; 2001US-00888360.
XX
PA (ISIS-) ISIS PHARM INC.
XX
PI Bennett FC, Dobie K;
XX
DR WPI; 2003-184032/18.
XX
PT Novel antisense compounds targeted to nucleic acids encoding human
PT superoxide dismutase 1, for modulating expression of the dismutase and
PT treating diseases or conditions, e.g. amyotrophic lateral sclerosis.
XX
PS Example 13; Page 74; 107pp; English.

```
XX
CC   The invention relates to a compound of 8-50 nucleobases in length,
CC   targeted to a nucleic acid molecule encoding human superoxide dismutase
CC   1. The compound specifically hybridises with and inhibits the expression
CC   of human superoxide dismutase 1 by hybridising with at least an 8-
CC   nucleobase portion of the nucleic acid molecule encoding the active site
CC   of the enzyme. The activity of compounds of the invention may be
CC   described as neuroprotective, cytostatic and antiinflammatory. The
CC   mechanism of action of compounds of the invention is antisense inhibition
CC   of human superoxide dismutase 1 expression by chimeric phosphorothioate
CC   oligonucleotides having 2'-methoxyethyl (2'-MOE) wings and a deoxy gap.
CC   Compounds of the invention are useful for inhibiting the expression of
CC   human superoxide dismutase 1 in human cells or tissues, and for treating
CC   a disease or condition associated with this enzyme (antisense therapy),
CC   especially amyotrophic lateral sclerosis, a disease or condition arising
CC   from aberrant apoptosis and a hyperproliferative disorder. It may also be
CC   used in diagnostics, therapeutics and as a research reagent, e.g.
CC   prophylactically to prevent or delay infection, inflammation or tumour
CC   formation. The current sequence represents the human superoxide dismutase
CC   1 forward primer sequence
XX
SQ   Sequence 20 BP; 6 A; 4 C; 5 G; 5 T; 0 U; 0 Other;

  Query Match             2.3%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 60;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        108 TGCAGGGCATCATCAATTTC 127
              ||||||||||||||||||||
Db         20 TGCAGGGCATCATCAATTTC 1


RESULT 76
ACC40900/c
ID   ACC40900 standard; DNA; 20 BP.
XX
AC   ACC40900;
XX
DT   23-MAY-2003  (first entry)
XX
DE   Human superoxide dismutase 1 antisense inhibitor # ISIS 150454.
XX
KW   Human; superoxide dismutase 1; antisense; neuroprotective; cytostatic;
KW   antiinflammatory; amyotrophic lateral sclerosis; apoptosis;
KW   hyperproliferative disorder; therapy; infection; inflammation; tumour;
KW   ss.
XX
OS   Homo sapiens.
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   modified_base   1. .20
FT                   /*tag=  a
FT                   /mod_base= OTHER
FT                   /note= "Phosphorothioate linkages. All cytosines are 5-
FT                   methylcytosine"
FT   modified_base   1. .5
FT                   /*tag=  b
FT                   /mod_base= OTHER
FT                   /note= "2'-methoxyethyl (2'-MOE) nucleotides"
FT   modified_base   16. .20
FT                   /*tag=  c
FT                   /mod_base= OTHER
FT                   /note= "2'-methoxyethyl (2'-MOE) nucleotides"
XX
PN   WO2003000707-A2.
XX
PD   03-JAN-2003.
XX
PF   19-JUN-2002; 2002WO-US019664.
XX
PR   21-JUN-2001; 2001US-00888360.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Bennett FC,  Dobie K;
XX
DR   WPI; 2003-184032/18.
XX
PT   Novel antisense compounds targeted to nucleic acids encoding human
PT   superoxide dismutase 1, for modulating expression of the dismutase and
PT   treating diseases or conditions, e.g. amyotrophic lateral sclerosis.
XX
PS   Claim 3; Page 76; 107pp; English.
XX
CC   The invention relates to a compound of 8-50 nucleobases in length,
CC   targeted to a nucleic acid molecule encoding human superoxide dismutase
CC   1. The compound specifically hybridises with and inhibits the expression
CC   of human superoxide dismutase 1 by hybridising with at least an 8-
CC   nucleobase portion of the nucleic acid molecule encoding the active site
CC   of the enzyme. The activity of compounds of the invention may be
CC   described as neuroprotective, cytostatic and antiinflammatory. The
CC   mechanism of action of compounds of the invention is antisense inhibition
CC   of human superoxide dismutase 1 expression by chimeric phosphorothioate
CC   oligonucleotides having 2'-methoxyethyl (2'-MOE) wings and a deoxy gap.
CC   Compounds of the invention are useful for inhibiting the expression of
CC   human superoxide dismutase 1 in human cells or tissues, and for treating
CC   a disease or condition associated with this enzyme (antisense therapy),
CC   especially amyotrophic lateral sclerosis, a disease or condition arising
CC   from aberrant apoptosis and a hyperproliferative disorder. It may also be
CC   used in diagnostics, therapeutics and as a research reagent, e.g.
CC   prophylactically to prevent or delay infection, inflammation or tumour
CC   formation. Sequences given in records ACC40880-ACC40957 represent human
CC   superoxide dismutase 1 antisense inhibitor oligonucleotides
XX
SQ   Sequence 20 BP; 5 A; 8 C; 3 G; 4 T; 0 U; 0 Other;

  Query Match             2.3%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 60;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        304 GCATGTTGGAGACTTGGGCA 323
              ||||||||||||||||||||
Db         20 GCATGTTGGAGACTTGGGCA 1


RESULT 77
ACC40938/c
ID   ACC40938 standard; DNA; 20 BP.
XX
AC   ACC40938;
XX
DT   23-MAY-2003  (first entry)
XX
DE   Human superoxide dismutase 1 antisense inhibitor # ISIS 150492.
XX
KW   Human; superoxide dismutase 1; antisense; neuroprotective; cytostatic;
KW   antiinflammatory; amyotrophic lateral sclerosis; apoptosis;
KW   hyperproliferative disorder; therapy; infection; inflammation; tumour;
KW   ss.
XX
OS   Homo sapiens.
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   modified_base   1. .20
FT                   /*tag=  a
FT                   /mod_base= OTHER
FT                   /note= "Phosphorothioate linkages. All cytosines are 5-
FT                   methylcytosine"
FT   modified_base   1. .5
FT                   /*tag=  b
FT                   /mod_base= OTHER
FT                   /note= "2'-methoxyethyl (2'-MOE) nucleotides"
FT   modified_base   16. .20
FT                   /*tag=  c
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FT                   /mod_base= OTHER
FT                   /note= "2'-methoxyethyl (2'-MOE) nucleotides"
XX
PN   WO2003000707-A2.
XX
PD   03-JAN-2003.
XX
PF   19-JUN-2002; 2002WO-US019664.
XX
PR   21-JUN-2001; 2001US-00888360.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Bennett FC,  Dobie K;
XX
DR   WPI; 2003-184032/18.
XX
PT   Novel antisense compounds targeted to nucleic acids encoding human
PT   superoxide dismutase 1, for modulating expression of the dismutase and
PT   treating diseases or conditions, e.g. amyotrophic lateral sclerosis.
XX
PS   Example 15; Page 77; 107pp; English.
XX
CC   The invention relates to a compound of 8-50 nucleobases in length,
CC   targeted to a nucleic acid molecule encoding human superoxide dismutase
CC   1. The compound specifically hybridises with and inhibits the expression
CC   of human superoxide dismutase 1 by hybridising with at least an 8-
CC   nucleobase portion of the nucleic acid molecule encoding the active site
CC   of the enzyme. The activity of compounds of the invention may be
CC   described as neuroprotective, cytostatic and antiinflammatory. The
CC   mechanism of action of compounds of the invention is antisense inhibition
CC   of human superoxide dismutase 1 expression by chimeric phosphorothioate
CC   oligonucleotides having 2'-methoxyethyl (2'-MOE) wings and a deoxy gap.
CC   Compounds of the invention are useful for inhibiting the expression of
CC   human superoxide dismutase 1 in human cells or tissues, and for treating
CC   a disease or condition associated with this enzyme (antisense therapy),
CC   especially amyotrophic lateral sclerosis, a disease or condition arising
CC   from aberrant apoptosis and a hyperproliferative disorder. It may also be
CC   used in diagnostics, therapeutics and as a research reagent, e.g.
CC   prophylactically to prevent or delay infection, inflammation or tumour
CC   formation. Sequences given in records ACC40880-ACC40957 represent human
CC   superoxide dismutase 1 antisense inhibitor oligonucleotides
XX
SQ   Sequence 20 BP; 5 A; 3 C; 5 G; 7 T; 0 U; 0 Other;

  Query Match             2.3%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 60;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        825 AAAAACCCTGTATGGCACTT 844
              ||||||||||||||||||||
Db         20 AAAAACCCTGTATGGCACTT 1


RESULT 78
ACC40939/c
ID   ACC40939 standard; DNA; 20 BP.
XX
AC   ACC40939;
XX
DT   23-MAY-2003  (first entry)
XX
DE   Human superoxide dismutase 1 antisense inhibitor # ISIS 150493.
XX
KW   Human; superoxide dismutase 1; antisense; neuroprotective; cytostatic;
KW   antiinflammatory; amyotrophic lateral sclerosis; apoptosis;
KW   hyperproliferative disorder; therapy; infection; inflammation; tumour;
KW   ss.
XX
OS   Homo sapiens.
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   modified_base   1. .20
FT                   /*tag=  a
FT                   /mod_base= OTHER
FT                   /note= "Phosphorothioate linkages. All cytosines are 5-
FT                   methylcytosine"
FT   modified_base   1. .5
FT                   /*tag=  b
FT                   /mod_base= OTHER
FT                   /note= "2'-methoxyethyl (2'-MOE) nucleotides"
FT   modified_base   16. .20
FT                   /*tag=  c
FT                   /mod_base= OTHER
FT                   /note= "2'-methoxyethyl (2'-MOE) nucleotides"
XX
PN   WO2003000707-A2.
XX
PD   03-JAN-2003.
XX
PF   19-JUN-2002; 2002WO-US019664.
XX
PR   21-JUN-2001; 2001US-00888360.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Bennett FC,  Dobie K;
XX
DR   WPI; 2003-184032/18.
XX
PT   Novel antisense compounds targeted to nucleic acids encoding human
PT   superoxide dismutase 1, for modulating expression of the dismutase and
PT   treating diseases or conditions, e.g. amyotrophic lateral sclerosis.
XX
PS   Example 15; Page 77; 107pp; English.
XX
CC   The invention relates to a compound of 8-50 nucleobases in length,
CC   targeted to a nucleic acid molecule encoding human superoxide dismutase
CC   1. The compound specifically hybridises with and inhibits the expression
CC   of human superoxide dismutase 1 by hybridising with at least an 8-
CC   nucleobase portion of the nucleic acid molecule encoding the active site
CC   of the enzyme. The activity of compounds of the invention may be
CC   described as neuroprotective, cytostatic and antiinflammatory. The
CC   mechanism of action of compounds of the invention is antisense inhibition
CC   of human superoxide dismutase 1 expression by chimeric phosphorothioate
CC   oligonucleotides having 2'-methoxyethyl (2'-MOE) wings and a deoxy gap.
CC   Compounds of the invention are useful for inhibiting the expression of
CC   human superoxide dismutase 1 in human cells or tissues, and for treating
CC   a disease or condition associated with this enzyme (antisense therapy),
CC   especially amyotrophic lateral sclerosis, a disease or condition arising
CC   from aberrant apoptosis and a hyperproliferative disorder. It may also be
CC   used in diagnostics, therapeutics and as a research reagent, e.g.
CC   prophylactically to prevent or delay infection, inflammation or tumour
CC   formation. Sequences given in records ACC40880-ACC40957 represent human
CC   superoxide dismutase 1 antisense inhibitor oligonucleotides
XX
SQ   Sequence 20 BP; 7 A; 3 C; 5 G; 5 T; 0 U; 0 Other;

  Query Match             2.3%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 60;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        829 ACCCTGTATGGCACTTATTA 848
              ||||||||||||||||||||
Db         20 ACCCTGTATGGCACTTATTA 1


RESULT 79
ACC40905/c
ID   ACC40905 standard; DNA; 20 BP.
XX
AC   ACC40905;
XX
DT   23-MAY-2003  (first entry)
XX
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```
DE   Human superoxide dismutase 1 antisense inhibitor # ISIS 150459.
XX
KW   Human; superoxide dismutase 1; antisense; neuroprotective; cytostatic;
KW   antiinflammatory; amyotrophic lateral sclerosis; apoptosis;
KW   hyperproliferative disorder; therapy; infection; inflammation; tumour;
KW   ss.
XX
OS   Homo sapiens.
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   modified_base   1. .20
FT                   /*tag=  a
FT                   /mod_base= OTHER
FT                   /note= "Phosphorothioate linkages. All cytosines are 5-
FT                   methylcytosine"
FT   modified_base   1. .5
FT                   /*tag=  b
FT                   /mod_base= OTHER
FT                   /note= "2'-methoxyethyl (2'-MOE) nucleotides"
FT   modified_base   16. .20
FT                   /*tag=  c
FT                   /mod_base= OTHER
FT                   /note= "2'-methoxyethyl (2'-MOE) nucleotides"
XX
PN   WO2003000707-A2.
XX
PD   03-JAN-2003.
XX
PF   19-JUN-2002; 2002WO-US019664.
XX
PR   21-JUN-2001; 2001US-00888360.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Bennett FC,  Dobie K;
XX
DR   WPI; 2003-184032/18.
XX
PT   Novel antisense compounds targeted to nucleic acids encoding human
PT   superoxide dismutase 1, for modulating expression of the dismutase and
PT   treating diseases or conditions, e.g. amyotrophic lateral sclerosis.
XX
PS   Claim 3; Page 77; 107pp; English.
XX
CC   The invention relates to a compound of 8-50 nucleobases in length,
CC   targeted to a nucleic acid molecule encoding human superoxide dismutase
CC   1. The compound specifically hybridises with and inhibits the expression
CC   of human superoxide dismutase 1 by hybridising with at least an 8-
CC   nucleobase portion of the nucleic acid molecule encoding the active site
CC   of the enzyme. The activity of compounds of the invention may be
CC   described as neuroprotective, cytostatic and antiinflammatory. The
CC   mechanism of action of compounds of the invention is antisense inhibition
CC   of human superoxide dismutase 1 expression by chimeric phosphorothioate
CC   oligonucleotides having 2'-methoxyethyl (2'-MOE) wings and a deoxy gap.
CC   Compounds of the invention are useful for inhibiting the expression of
CC   human superoxide dismutase 1 in human cells or tissues, and for treating
CC   a disease or condition associated with this enzyme (antisense therapy),
CC   especially amyotrophic lateral sclerosis, a disease or condition arising
CC   from aberrant apoptosis and a hyperproliferative disorder. It may also be
CC   used in diagnostics, therapeutics and as a research reagent, e.g.
CC   prophylactically to prevent or delay infection, inflammation or tumour
CC   formation. Sequences given in records ACC40880-ACC40957 represent human
CC   superoxide dismutase 1 antisense inhibitor oligonucleotides
XX
SQ   Sequence 20 BP; 7 A; 8 C; 3 G; 2 T; 0 U; 0 Other;

  Query Match             2.3%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 60;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        343 TGGTGTGGCCGATGTGTCTA 362
              ||||||||||||||||||||
Db         20 TGGTGTGGCCGATGTGTCTA 1


RESULT 80
ACC40918/c
ID   ACC40918 standard; DNA; 20 BP.
XX
AC   ACC40918;
XX
DT   23-MAY-2003  (first entry)
XX
DE   Human superoxide dismutase 1 antisense inhibitor # ISIS 150472.
XX
KW   Human; superoxide dismutase 1; antisense; neuroprotective; cytostatic;
KW   antiinflammatory; amyotrophic lateral sclerosis; apoptosis;
KW   hyperproliferative disorder; therapy; infection; inflammation; tumour;
KW   ss.
XX
OS   Homo sapiens.
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   modified_base   1. .20
FT                   /*tag=  a
FT                   /mod_base= OTHER
FT                   /note= "Phosphorothioate linkages. All cytosines are 5-
FT                   methylcytosine"
FT   modified_base   1. .5
FT                   /*tag=  b
FT                   /mod_base= OTHER
FT                   /note= "2'-methoxyethyl (2'-MOE) nucleotides"
FT   modified_base   16. .20
FT                   /*tag=  c
FT                   /mod_base= OTHER
FT                   /note= "2'-methoxyethyl (2'-MOE) nucleotides"
XX
PN   WO2003000707-A2.
XX
PD   03-JAN-2003.
XX
PF   19-JUN-2002; 2002WO-US019664.
XX
PR   21-JUN-2001; 2001US-00888360.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Bennett FC,  Dobie K;
XX
DR   WPI; 2003-184032/18.
XX
PT   Novel antisense compounds targeted to nucleic acids encoding human
PT   superoxide dismutase 1, for modulating expression of the dismutase and
PT   treating diseases or conditions, e.g. amyotrophic lateral sclerosis.
XX
PS   Example 15; Page 77; 107pp; English.
XX
CC   The invention relates to a compound of 8-50 nucleobases in length,
CC   targeted to a nucleic acid molecule encoding human superoxide dismutase
CC   1. The compound specifically hybridises with and inhibits the expression
CC   of human superoxide dismutase 1 by hybridising with at least an 8-
CC   nucleobase portion of the nucleic acid molecule encoding the active site
CC   of the enzyme. The activity of compounds of the invention may be
CC   described as neuroprotective, cytostatic and antiinflammatory. The
CC   mechanism of action of compounds of the invention is antisense inhibition
CC   of human superoxide dismutase 1 expression by chimeric phosphorothioate
CC   oligonucleotides having 2'-methoxyethyl (2'-MOE) wings and a deoxy gap.
CC   Compounds of the invention are useful for inhibiting the expression of
CC   human superoxide dismutase 1 in human cells or tissues, and for treating
CC   a disease or condition associated with this enzyme (antisense therapy),
CC   especially amyotrophic lateral sclerosis, a disease or condition arising
CC   from aberrant apoptosis and a hyperproliferative disorder. It may also be
CC   used in diagnostics, therapeutics and as a research reagent, e.g.
CC   prophylactically to prevent or delay infection, inflammation or tumour
```

```
CC   formation. Sequences given in records ACC40880-ACC40957 represent human
CC   superoxide dismutase 1 antisense inhibitor oligonucleotides
XX
SQ   Sequence 20 BP; 7 A; 5 C; 1 G; 7 T; 0 U; 0 Other;

  Query Match             2.3%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 60;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        671 TAGTGAGAAACTGATTTATG 690
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Db         20 TAGTGAGAAACTGATTTATG 1


RESULT 81
ACC40934/c
ID   ACC40934 standard; DNA; 20 BP.
XX
AC   ACC40934;
XX
DT   23-MAY-2003  (first entry)
XX
DE   Human superoxide dismutase 1 antisense inhibitor # ISIS 150488.
XX
KW   Human; superoxide dismutase 1; antisense; neuroprotective; cytostatic;
KW   antiinflammatory; amyotrophic lateral sclerosis; apoptosis;
KW   hyperproliferative disorder; therapy; infection; inflammation; tumour;
KW   ss.
XX
OS   Homo sapiens.
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   modified_base   1. .20
FT                   /*tag=  a
FT                   /mod_base= OTHER
FT                   /note= "Phosphorothioate linkages. All cytosines are 5-
FT                   methylcytosine"
FT   modified_base   1. .5
FT                   /*tag=  b
FT                   /mod_base= OTHER
FT                   /note= "2'-methoxyethyl (2'-MOE) nucleotides"
FT   modified_base   16. .20
FT                   /*tag=  c
FT                   /mod_base= OTHER
FT                   /note= "2'-methoxyethyl (2'-MOE) nucleotides"
XX
PN   WO2003000707-A2.
XX
PD   03-JAN-2003.
XX
PF   19-JUN-2002; 2002WO-US019664.
XX
PR   21-JUN-2001; 2001US-00888360.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Bennett FC,  Dobie K;
XX
DR   WPI; 2003-184032/18.
XX
PT   Novel antisense compounds targeted to nucleic acids encoding human
PT   superoxide dismutase 1, for modulating expression of the dismutase and
PT   treating diseases or conditions, e.g. amyotrophic lateral sclerosis.
XX
PS   Claim 3; Page 77; 107pp; English.
XX
CC   The invention relates to a compound of 8-50 nucleobases in length,
CC   targeted to a nucleic acid molecule encoding human superoxide dismutase
CC   1. The compound specifically hybridises with and inhibits the expression
CC   of human superoxide dismutase 1 by hybridising with at least an 8-
CC   nucleobase portion of the nucleic acid molecule encoding the active site
CC   of the enzyme. The activity of compounds of the invention may be
CC   described as neuroprotective, cytostatic and antiinflammatory. The
CC   mechanism of action of compounds of the invention is antisense inhibition
CC   of human superoxide dismutase 1 expression by chimeric phosphorothioate
CC   oligonucleotides having 2'-methoxyethyl (2'-MOE) wings and a deoxy gap.
CC   Compounds of the invention are useful for inhibiting the expression of
CC   human superoxide dismutase 1 in human cells or tissues, and for treating
CC   a disease or condition associated with this enzyme (antisense therapy),
CC   especially amyotrophic lateral sclerosis, a disease or condition arising
CC   from aberrant apoptosis and a hyperproliferative disorder. It may also be
CC   used in diagnostics, therapeutics and as a research reagent, e.g.
CC   prophylactically to prevent or delay infection, inflammation or tumour
CC   formation. Sequences given in records ACC40880-ACC40957 represent human
CC   superoxide dismutase 1 antisense inhibitor oligonucleotides
XX
SQ   Sequence 20 BP; 3 A; 3 C; 5 G; 9 T; 0 U; 0 Other;

  Query Match             2.3%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 60;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        812 CAAGCCTGTGAATAAAAACC 831
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Db         20 CAAGCCTGTGAATAAAAACC 1


RESULT 82
ACC40941/c
ID   ACC40941 standard; DNA; 20 BP.
XX
AC   ACC40941;
XX
DT   23-MAY-2003  (first entry)
XX
DE   Human superoxide dismutase 1 antisense inhibitor # ISIS 150495.
XX
KW   Human; superoxide dismutase 1; antisense; neuroprotective; cytostatic;
KW   antiinflammatory; amyotrophic lateral sclerosis; apoptosis;
KW   hyperproliferative disorder; therapy; infection; inflammation; tumour;
KW   ss.
XX
OS   Homo sapiens.
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   modified_base   1. .20
FT                   /*tag=  a
FT                   /mod_base= OTHER
FT                   /note= "Phosphorothioate linkages. All cytosines are 5-
FT                   methylcytosine"
FT   modified_base   1. .5
FT                   /*tag=  b
FT                   /mod_base= OTHER
FT                   /note= "2'-methoxyethyl (2'-MOE) nucleotides"
FT   modified_base   16. .20
FT                   /*tag=  c
FT                   /mod_base= OTHER
FT                   /note= "2'-methoxyethyl (2'-MOE) nucleotides"
XX
PN   WO2003000707-A2.
XX
PD   03-JAN-2003.
XX
PF   19-JUN-2002; 2002WO-US019664.
XX
PR   21-JUN-2001; 2001US-00888360.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Bennett FC,  Dobie K;
XX
DR   WPI; 2003-184032/18.
XX
PT   Novel antisense compounds targeted to nucleic acids encoding human
```

```
PT   superoxide dismutase 1, for modulating expression of the dismutase and
PT   treating diseases or conditions, e.g. amyotrophic lateral sclerosis.
XX
PS   Claim 3; Page 77; 107pp; English.
XX
CC   The invention relates to a compound of 8-50 nucleobases in length,
CC   targeted to a nucleic acid molecule encoding human superoxide dismutase
CC   1. The compound specifically hybridises with and inhibits the expression
CC   of human superoxide dismutase 1 by hybridising with at least an 8-
CC   nucleobase portion of the nucleic acid molecule encoding the active site
CC   of the enzyme. The activity of compounds of the invention may be
CC   described as neuroprotective, cytostatic and antiinflammatory. The
CC   mechanism of action of compounds of the invention is antisense inhibition
CC   of human superoxide dismutase 1 expression by chimeric phosphorothioate
CC   oligonucleotides having 2'-methoxyethyl (2'-MOE) wings and a deoxy gap.
CC   Compounds of the invention are useful for inhibiting the expression of
CC   human superoxide dismutase 1 in human cells or tissues, and for treating
CC   a disease or condition associated with this enzyme (antisense therapy),
CC   especially amyotrophic lateral sclerosis, a disease or condition arising
CC   from aberrant apoptosis and a hyperproliferative disorder. It may also be
CC   used in diagnostics, therapeutics and as a research reagent, e.g.
CC   prophylactically to prevent or delay infection, inflammation or tumour
CC   formation. Sequences given in records ACC40880-ACC40957 represent human
CC   superoxide dismutase 1 antisense inhibitor oligonucleotides
XX
SQ   Sequence 20 BP; 8 A; 5 C; 2 G; 5 T; 0 U; 0 Other;

  Query Match              2.3%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 60;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        833 TGTATGGCACTTATTATGAG 852
              ||||||||||||||||||||
Db         20 TGTATGGCACTTATTATGAG 1


RESULT 83
ACC40895/c
ID   ACC40895 standard; DNA; 20 BP.
XX
AC   ACC40895;
XX
DT   23-MAY-2003  (first entry)
XX
DE   Human superoxide dismutase 1 antisense inhibitor # ISIS 150449.
XX
KW   Human; superoxide dismutase 1; antisense; neuroprotective; cytostatic;
KW   antiinflammatory; amyotrophic lateral sclerosis; apoptosis;
KW   hyperproliferative disorder; therapy; infection; inflammation; tumour;
KW   ss.
XX
OS   Homo sapiens.
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   modified_base   1. .20
FT                   /*tag=  a
FT                   /mod_base= OTHER
FT                   /note= "Phosphorothioate linkages. All cytosines are 5-
FT                   methylcytosine"
FT   modified_base   1. .5
FT                   /*tag=  b
FT                   /mod_base= OTHER
FT                   /note= "2'-methoxyethyl (2'-MOE) nucleotides"
FT   modified_base   16. .20
FT                   /*tag=  c
FT                   /mod_base= OTHER
FT                   /note= "2'-methoxyethyl (2'-MOE) nucleotides"
XX
PN   WO2003000707-A2.
XX
PD   03-JAN-2003.
XX
PF   19-JUN-2002; 2002WO-US019664.
XX
PR   21-JUN-2001; 2001US-00888360.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Bennett FC,  Dobie K;
XX
DR   WPI; 2003-184032/18.
XX
PT   Novel antisense compounds targeted to nucleic acids encoding human
PT   superoxide dismutase 1, for modulating expression of the dismutase and
PT   treating diseases or conditions, e.g. amyotrophic lateral sclerosis.
XX
PS   Example 15; Page 76; 107pp; English.
XX
CC   The invention relates to a compound of 8-50 nucleobases in length,
CC   targeted to a nucleic acid molecule encoding human superoxide dismutase
CC   1. The compound specifically hybridises with and inhibits the expression
CC   of human superoxide dismutase 1 by hybridising with at least an 8-
CC   nucleobase portion of the nucleic acid molecule encoding the active site
CC   of the enzyme. The activity of compounds of the invention may be
CC   described as neuroprotective, cytostatic and antiinflammatory. The
CC   mechanism of action of compounds of the invention is antisense inhibition
CC   of human superoxide dismutase 1 expression by chimeric phosphorothioate
CC   oligonucleotides having 2'-methoxyethyl (2'-MOE) wings and a deoxy gap.
CC   Compounds of the invention are useful for inhibiting the expression of
CC   human superoxide dismutase 1 in human cells or tissues, and for treating
CC   a disease or condition associated with this enzyme (antisense therapy),
CC   especially amyotrophic lateral sclerosis, a disease or condition arising
CC   from aberrant apoptosis and a hyperproliferative disorder. It may also be
CC   used in diagnostics, therapeutics and as a research reagent, e.g.
CC   prophylactically to prevent or delay infection, inflammation or tumour
CC   formation. Sequences given in records ACC40880-ACC40957 represent human
CC   superoxide dismutase 1 antisense inhibitor oligonucleotides
XX
SQ   Sequence 20 BP; 3 A; 6 C; 4 G; 7 T; 0 U; 0 Other;

  Query Match              2.3%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 60;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        173 AAAGGACTGACTGAAGGCCT 192
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Db         20 AAAGGACTGACTGAAGGCCT 1


RESULT 84
ACC40901/c
ID   ACC40901 standard; DNA; 20 BP.
XX
AC   ACC40901;
XX
DT   23-MAY-2003  (first entry)
XX
DE   Human superoxide dismutase 1 antisense inhibitor # ISIS 150455.
XX
KW   Human; superoxide dismutase 1; antisense; neuroprotective; cytostatic;
KW   antiinflammatory; amyotrophic lateral sclerosis; apoptosis;
KW   hyperproliferative disorder; therapy; infection; inflammation; tumour;
KW   ss.
XX
OS   Homo sapiens.
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   modified_base   1. .20
FT                   /*tag=  a
FT                   /mod_base= OTHER
FT                   /note= "Phosphorothioate linkages. All cytosines are 5-
FT                   methylcytosine"
FT   modified_base   1. .5
FT                   /*tag=  b
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FT                   /mod_base= OTHER
FT                   /note= "2'-methoxyethyl (2'-MOE) nucleotides"
FT   modified_base   16. .20
FT                   /*tag=  c
FT                   /mod_base= OTHER
FT                   /note= "2'-methoxyethyl (2'-MOE) nucleotides"
XX
PN   WO2003000707-A2.
XX
PD   03-JAN-2003.
XX
PF   19-JUN-2002; 2002WO-US019664.
XX
PR   21-JUN-2001; 2001US-00888360.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Bennett FC,  Dobie K;
XX
DR   WPI; 2003-184032/18.
XX
PT   Novel antisense compounds targeted to nucleic acids encoding human
PT   superoxide dismutase 1, for modulating expression of the dismutase and
PT   treating diseases or conditions, e.g. amyotrophic lateral sclerosis.
XX
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XX
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CC   targeted to a nucleic acid molecule encoding human superoxide dismutase
CC   1. The compound specifically hybridises with and inhibits the expression
CC   of human superoxide dismutase 1 by hybridising with at least an 8-
CC   nucleobase portion of the nucleic acid molecule encoding the active site
CC   of the enzyme. The activity of compounds of the invention may be
CC   described as neuroprotective, cytostatic and antiinflammatory. The
CC   mechanism of action of compounds of the invention is antisense inhibition
CC   of human superoxide dismutase 1 expression by chimeric phosphorothioate
CC   oligonucleotides having 2'-methoxyethyl (2'-MOE) wings and a deoxy gap.
CC   Compounds of the invention are useful for inhibiting the expression of
CC   human superoxide dismutase 1 in human cells or tissues, and for treating
CC   a disease or condition associated with this enzyme (antisense therapy),
CC   especially amyotrophic lateral sclerosis, a disease or condition arising
CC   from aberrant apoptosis and a hyperproliferative disorder. It may also be
CC   used in diagnostics, therapeutics and as a research reagent, e.g.
CC   prophylactically to prevent or delay infection, inflammation or tumour
CC   formation. Sequences given in records ACC40880-ACC40957 represent human
CC   superoxide dismutase 1 antisense inhibitor oligonucleotides
XX
SQ   Sequence 20 BP; 6 A; 8 C; 2 G; 4 T; 0 U; 0 Other;

  Query Match             2.3%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 60;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        309 TTGGAGACTTGGGCAATGTG 328
              ||||||||||||||||||||
Db         20 TTGGAGACTTGGGCAATGTG 1


RESULT 85
ACC40916/c
ID   ACC40916 standard; DNA; 20 BP.
XX
AC   ACC40916;
XX
DT   23-MAY-2003  (first entry)
XX
DE   Human superoxide dismutase 1 antisense inhibitor # ISIS 150470.
XX
KW   Human; superoxide dismutase 1; antisense; neuroprotective; cytostatic;
KW   antiinflammatory; amyotrophic lateral sclerosis; apoptosis;
KW   hyperproliferative disorder; therapy; infection; inflammation; tumour;
KW   ss.
XX
OS   Homo sapiens.
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   modified_base   1. .20
FT                   /*tag=  a
FT                   /mod_base= OTHER
FT                   /note= "Phosphorothioate linkages. All cytosines are 5-
FT                   methylcytosine"
FT   modified_base   1. .5
FT                   /*tag=  b
FT                   /mod_base= OTHER
FT                   /note= "2'-methoxyethyl (2'-MOE) nucleotides"
FT   modified_base   16. .20
FT                   /*tag=  c
FT                   /mod_base= OTHER
FT                   /note= "2'-methoxyethyl (2'-MOE) nucleotides"
XX
PN   WO2003000707-A2.
XX
PD   03-JAN-2003.
XX
PF   19-JUN-2002; 2002WO-US019664.
XX
PR   21-JUN-2001; 2001US-00888360.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Bennett FC,  Dobie K;
XX
DR   WPI; 2003-184032/18.
XX
PT   Novel antisense compounds targeted to nucleic acids encoding human
PT   superoxide dismutase 1, for modulating expression of the dismutase and
PT   treating diseases or conditions, e.g. amyotrophic lateral sclerosis.
XX
PS   Example 15; Page 77; 107pp; English.
XX
CC   The invention relates to a compound of 8-50 nucleobases in length,
CC   targeted to a nucleic acid molecule encoding human superoxide dismutase
CC   1. The compound specifically hybridises with and inhibits the expression
CC   of human superoxide dismutase 1 by hybridising with at least an 8-
CC   nucleobase portion of the nucleic acid molecule encoding the active site
CC   of the enzyme. The activity of compounds of the invention may be
CC   described as neuroprotective, cytostatic and antiinflammatory. The
CC   mechanism of action of compounds of the invention is antisense inhibition
CC   of human superoxide dismutase 1 expression by chimeric phosphorothioate
CC   oligonucleotides having 2'-methoxyethyl (2'-MOE) wings and a deoxy gap.
CC   Compounds of the invention are useful for inhibiting the expression of
CC   human superoxide dismutase 1 in human cells or tissues, and for treating
CC   a disease or condition associated with this enzyme (antisense therapy),
CC   especially amyotrophic lateral sclerosis, a disease or condition arising
CC   from aberrant apoptosis and a hyperproliferative disorder. It may also be
CC   used in diagnostics, therapeutics and as a research reagent, e.g.
CC   prophylactically to prevent or delay infection, inflammation or tumour
CC   formation. Sequences given in records ACC40880-ACC40957 represent human
CC   superoxide dismutase 1 antisense inhibitor oligonucleotides
XX
SQ   Sequence 20 BP; 6 A; 5 C; 3 G; 6 T; 0 U; 0 Other;

  Query Match             2.3%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 60;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        667 CCTGTAGTGAGAAACTGATT 686
              ||||||||||||||||||||
Db         20 CCTGTAGTGAGAAACTGATT 1


RESULT 86
ACC40929/c
ID   ACC40929 standard; DNA; 20 BP.
XX
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AC   ACC40929;
XX
DT   23-MAY-2003  (first entry)
XX
DE   Human superoxide dismutase 1 antisense inhibitor # ISIS 150483.
XX
KW   Human; superoxide dismutase 1; antisense; neuroprotective; cytostatic;
KW   antiinflammatory; amyotrophic lateral sclerosis; apoptosis;
KW   hyperproliferative disorder; therapy; infection; inflammation; tumour;
KW   ss.
XX
OS   Homo sapiens.
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   modified_base   1. .20
FT                   /*tag= a
FT                   /mod_base= OTHER
FT                   /note= "Phosphorothioate linkages. All cytosines are 5-
FT                   methylcytosine"
FT   modified_base   1. .5
FT                   /*tag= b
FT                   /mod_base= OTHER
FT                   /note= "2'-methoxyethyl (2'-MOE) nucleotides"
FT   modified_base   16. .20
FT                   /*tag= c
FT                   /mod_base= OTHER
FT                   /note= "2'-methoxyethyl (2'-MOE) nucleotides"
XX
PN   WO2003000707-A2.
XX
PD   03-JAN-2003.
XX
PF   19-JUN-2002; 2002WO-US019664.
XX
PR   21-JUN-2001; 2001US-00888360.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Bennett FC,  Dobie K;
XX
DR   WPI; 2003-184032/18.
XX
PT   Novel antisense compounds targeted to nucleic acids encoding human
PT   superoxide dismutase 1, for modulating expression of the dismutase and
PT   treating diseases or conditions, e.g. amyotrophic lateral sclerosis.
XX
PS   Example 15; Page 77; 107pp; English.
XX
CC   The invention relates to a compound of 8-50 nucleobases in length,
CC   targeted to a nucleic acid molecule encoding human superoxide dismutase
CC   1. The compound specifically hybridises with and inhibits the expression
CC   of human superoxide dismutase 1 by hybridising with at least an 8-
CC   nucleobase portion of the nucleic acid molecule encoding the active site
CC   of the enzyme. The activity of compounds of the invention may be
CC   described as neuroprotective, cytostatic and antiinflammatory. The
CC   mechanism of action of compounds of the invention is antisense inhibition
CC   of human superoxide dismutase 1 expression by chimeric phosphorothioate
CC   oligonucleotides having 2'-methoxyethyl (2'-MOE) wings and a deoxy gap.
CC   Compounds of the invention are useful for inhibiting the expression of
CC   human superoxide dismutase 1 in human cells or tissues, and for treating
CC   a disease or condition associated with this enzyme (antisense therapy),
CC   especially amyotrophic lateral sclerosis, a disease or condition arising
CC   from aberrant apoptosis and a hyperproliferative disorder. It may also be
CC   used in diagnostics, therapeutics and as a research reagent, e.g.
CC   prophylactically to prevent or delay infection, inflammation or tumour
CC   formation. Sequences given in records ACC40880-ACC40957 represent human
CC   superoxide dismutase 1 antisense inhibitor oligonucleotides
XX
SQ   Sequence 20 BP; 6 A; 4 C; 3 G; 7 T; 0 U; 0 Other;

  Query Match           2.3%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity  100.0%;  Pred. No. 60;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        771 TCACAGATGGGTATTAAACT 790
              ||||||||||||||||||||
Db         20 TCACAGATGGGTATTAAACT 1


RESULT 87
ACC40924/c
ID   ACC40924 standard; DNA; 20 BP.
XX
AC   ACC40924;
XX
DT   23-MAY-2003  (first entry)
XX
DE   Human superoxide dismutase 1 antisense inhibitor # ISIS 150478.
XX
KW   Human; superoxide dismutase 1; antisense; neuroprotective; cytostatic;
KW   antiinflammatory; amyotrophic lateral sclerosis; apoptosis;
KW   hyperproliferative disorder; therapy; infection; inflammation; tumour;
KW   ss.
XX
OS   Homo sapiens.
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   modified_base   1. .20
FT                   /*tag= a
FT                   /mod_base= OTHER
FT                   /note= "Phosphorothioate linkages. All cytosines are 5-
FT                   methylcytosine"
FT   modified_base   1. .5
FT                   /*tag= b
FT                   /mod_base= OTHER
FT                   /note= "2'-methoxyethyl (2'-MOE) nucleotides"
FT   modified_base   16. .20
FT                   /*tag= c
FT                   /mod_base= OTHER
FT                   /note= "2'-methoxyethyl (2'-MOE) nucleotides"
XX
PN   WO2003000707-A2.
XX
PD   03-JAN-2003.
XX
PF   19-JUN-2002; 2002WO-US019664.
XX
PR   21-JUN-2001; 2001US-00888360.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Bennett FC,  Dobie K;
XX
DR   WPI; 2003-184032/18.
XX
PT   Novel antisense compounds targeted to nucleic acids encoding human
PT   superoxide dismutase 1, for modulating expression of the dismutase and
PT   treating diseases or conditions, e.g. amyotrophic lateral sclerosis.
XX
PS   Example 15; Page 77; 107pp; English.
XX
CC   The invention relates to a compound of 8-50 nucleobases in length,
CC   targeted to a nucleic acid molecule encoding human superoxide dismutase
CC   1. The compound specifically hybridises with and inhibits the expression
CC   of human superoxide dismutase 1 by hybridising with at least an 8-
CC   nucleobase portion of the nucleic acid molecule encoding the active site
CC   of the enzyme. The activity of compounds of the invention may be
CC   described as neuroprotective, cytostatic and antiinflammatory. The
CC   mechanism of action of compounds of the invention is antisense inhibition
CC   of human superoxide dismutase 1 expression by chimeric phosphorothioate
CC   oligonucleotides having 2'-methoxyethyl (2'-MOE) wings and a deoxy gap.
CC   Compounds of the invention are useful for inhibiting the expression of
CC   human superoxide dismutase 1 in human cells or tissues, and for treating
CC   a disease or condition associated with this enzyme (antisense therapy),
```

```
CC   especially amyotrophic lateral sclerosis, a disease or condition arising
CC   from aberrant apoptosis and a hyperproliferative disorder. It may also be
CC   used in diagnostics, therapeutics and as a research reagent, e.g.
CC   prophylactically to prevent or delay infection, inflammation or tumour
CC   formation. Sequences given in records ACC40880-ACC40957 represent human
CC   superoxide dismutase 1 antisense inhibitor oligonucleotides
XX
SQ   Sequence 20 BP; 9 A; 3 C; 2 G; 6 T; 0 U; 0 Other;

  Query Match             2.3%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 60;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        727 GTTAAAATGTCTGTTTCAAT 746
              ||||||||||||||||||||
Db         20 GTTAAAATGTCTGTTTCAAT 1


RESULT 88
ACC40925/c
ID   ACC40925 standard; DNA; 20 BP.
XX
AC   ACC40925;
XX
DT   23-MAY-2003  (first entry)
XX
DE   Human superoxide dismutase 1 antisense inhibitor # ISIS 150479.
XX
KW   Human; superoxide dismutase 1; antisense; neuroprotective; cytostatic;
KW   antiinflammatory; amyotrophic lateral sclerosis; apoptosis;
KW   hyperproliferative disorder; therapy; infection; inflammation; tumour;
KW   ss.
XX
OS   Homo sapiens.
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   modified_base   1. .20
FT                   /*tag=  a
FT                   /mod_base= OTHER
FT                   /note= "Phosphorothioate linkages. All cytosines are 5-
FT                   methylcytosine"
FT   modified_base   1. .5
FT                   /*tag=  b
FT                   /mod_base= OTHER
FT                   /note= "2'-methoxyethyl (2'-MOE) nucleotides"
FT   modified_base   16. .20
FT                   /*tag=  c
FT                   /mod_base= OTHER
FT                   /note= "2'-methoxyethyl (2'-MOE) nucleotides"
XX
PN   WO2003000707-A2.
XX
PD   03-JAN-2003.
XX
PF   19-JUN-2002; 2002WO-US019664.
XX
PR   21-JUN-2001; 2001US-00888360.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Bennett FC,  Dobie K;
XX
DR   WPI; 2003-184032/18.
XX
PT   Novel antisense compounds targeted to nucleic acids encoding human
PT   superoxide dismutase 1, for modulating expression of the dismutase and
PT   treating diseases or conditions, e.g. amyotrophic lateral sclerosis.
XX
PS   Example 15; Page 77; 107pp; English.
XX
CC   The invention relates to a compound of 8-50 nucleobases in length,
CC   targeted to a nucleic acid molecule encoding human superoxide dismutase
CC   1. The compound specifically hybridises with and inhibits the expression
CC   of human superoxide dismutase 1 by hybridising with at least an 8-
CC   nucleobase portion of the nucleic acid molecule encoding the active site
CC   of the enzyme. The activity of compounds of the invention may be
CC   described as neuroprotective, cytostatic and antiinflammatory. The
CC   mechanism of action of compounds of the invention is antisense inhibition
CC   of human superoxide dismutase 1 expression by chimeric phosphorothioate
CC   oligonucleotides having 2'-methoxyethyl (2'-MOE) wings and a deoxy gap.
CC   Compounds of the invention are useful for inhibiting the expression of
CC   human superoxide dismutase 1 in human cells or tissues, and for treating
CC   a disease or condition associated with this enzyme (antisense therapy),
CC   especially amyotrophic lateral sclerosis, a disease or condition arising
CC   from aberrant apoptosis and a hyperproliferative disorder. It may also be
CC   used in diagnostics, therapeutics and as a research reagent, e.g.
CC   prophylactically to prevent or delay infection, inflammation or tumour
CC   formation. Sequences given in records ACC40880-ACC40957 represent human
CC   superoxide dismutase 1 antisense inhibitor oligonucleotides
XX
SQ   Sequence 20 BP; 8 A; 3 C; 2 G; 7 T; 0 U; 0 Other;

  Query Match             2.3%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 60;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        729 TAAAATGTCTGTTTCAATGA 748
              ||||||||||||||||||||
Db         20 TAAAATGTCTGTTTCAATGA 1


RESULT 89
ACC40926/c
ID   ACC40926 standard; DNA; 20 BP.
XX
AC   ACC40926;
XX
DT   23-MAY-2003  (first entry)
XX
DE   Human superoxide dismutase 1 antisense inhibitor # ISIS 150480.
XX
KW   Human; superoxide dismutase 1; antisense; neuroprotective; cytostatic;
KW   antiinflammatory; amyotrophic lateral sclerosis; apoptosis;
KW   hyperproliferative disorder; therapy; infection; inflammation; tumour;
KW   ss.
XX
OS   Homo sapiens.
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   modified_base   1. .20
FT                   /*tag=  a
FT                   /mod_base= OTHER
FT                   /note= "Phosphorothioate linkages. All cytosines are 5-
FT                   methylcytosine"
FT   modified_base   1. .5
FT                   /*tag=  b
FT                   /mod_base= OTHER
FT                   /note= "2'-methoxyethyl (2'-MOE) nucleotides"
FT   modified_base   16. .20
FT                   /*tag=  c
FT                   /mod_base= OTHER
FT                   /note= "2'-methoxyethyl (2'-MOE) nucleotides"
XX
PN   WO2003000707-A2.
XX
PD   03-JAN-2003.
XX
PF   19-JUN-2002; 2002WO-US019664.
XX
PR   21-JUN-2001; 2001US-00888360.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Bennett FC,  Dobie K;
```

```
XX
DR   WPI; 2003-184032/18.
XX
PT   Novel antisense compounds targeted to nucleic acids encoding human
PT   superoxide dismutase 1, for modulating expression of the dismutase and
PT   treating diseases or conditions, e.g. amyotrophic lateral sclerosis.
XX
PS   Claim 3; Page 77; 107pp; English.
XX
CC   The invention relates to a compound of 8-50 nucleobases in length,
CC   targeted to a nucleic acid molecule encoding human superoxide dismutase
CC   1. The compound specifically hybridises with and inhibits the expression
CC   of human superoxide dismutase 1 by hybridising with at least an 8-
CC   nucleobase portion of the nucleic acid molecule encoding the active site
CC   of the enzyme. The activity of compounds of the invention may be
CC   described as neuroprotective, cytostatic and antiinflammatory. The
CC   mechanism of action of compounds of the invention is antisense inhibition
CC   of human superoxide dismutase 1 expression by chimeric phosphorothioate
CC   oligonucleotides having 2'-methoxyethyl (2'-MOE) wings and a deoxy gap.
CC   Compounds of the invention are useful for inhibiting the expression of
CC   human superoxide dismutase 1 in human cells or tissues, and for treating
CC   a disease or condition associated with this enzyme (antisense therapy),
CC   especially amyotrophic lateral sclerosis, a disease or condition arising
CC   from aberrant apoptosis and a hyperproliferative disorder. It may also be
CC   used in diagnostics, therapeutics and as a research reagent, e.g.
CC   prophylactically to prevent or delay infection, inflammation or tumour
CC   formation. Sequences given in records ACC40880-ACC40957 represent human
CC   superoxide dismutase 1 antisense inhibitor oligonucleotides
XX
SQ   Sequence 20 BP; 9 A; 3 C; 4 G; 4 T; 0 U; 0 Other;

  Query Match             2.3%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 60;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        736 TCTGTTTCAATGACCTGTAT 755
              ||||||||||||||||||||
Db         20 TCTGTTTCAATGACCTGTAT 1


RESULT 90
ACC40888/c
ID   ACC40888 standard; DNA; 20 BP.
XX
AC   ACC40888;
XX
DT   23-MAY-2003  (first entry)
XX
DE   Human superoxide dismutase 1 antisense inhibitor # ISIS 150442.
XX
KW   Human; superoxide dismutase 1; antisense; neuroprotective; cytostatic;
KW   antiinflammatory; amyotrophic lateral sclerosis; apoptosis;
KW   hyperproliferative disorder; therapy; infection; inflammation; tumour;
KW   ss.
XX
OS   Homo sapiens.
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   modified_base   1. .20
FT                   /*tag=  a
FT                   /mod_base= OTHER
FT                   /note= "Phosphorothioate linkages. All cytosines are 5-
FT                   methylcytosine"
FT   modified_base   1. .5
FT                   /*tag=  b
FT                   /mod_base= OTHER
FT                   /note= "2'-methoxyethyl (2'-MOE) nucleotides"
FT   modified_base   16. .20
FT                   /*tag=  c
FT                   /mod_base= OTHER
FT                   /note= "2'-methoxyethyl (2'-MOE) nucleotides"
XX
PN   WO2003000707-A2.
XX
PD   03-JAN-2003.
XX
PF   19-JUN-2002; 2002WO-US019664.
XX
PR   21-JUN-2001; 2001US-00888360.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Bennett FC,  Dobie K;
XX
DR   WPI; 2003-184032/18.
XX
PT   Novel antisense compounds targeted to nucleic acids encoding human
PT   superoxide dismutase 1, for modulating expression of the dismutase and
PT   treating diseases or conditions, e.g. amyotrophic lateral sclerosis.
XX
PS   Example 15; Page 76; 107pp; English.
XX
CC   The invention relates to a compound of 8-50 nucleobases in length,
CC   targeted to a nucleic acid molecule encoding human superoxide dismutase
CC   1. The compound specifically hybridises with and inhibits the expression
CC   of human superoxide dismutase 1 by hybridising with at least an 8-
CC   nucleobase portion of the nucleic acid molecule encoding the active site
CC   of the enzyme. The activity of compounds of the invention may be
CC   described as neuroprotective, cytostatic and antiinflammatory. The
CC   mechanism of action of compounds of the invention is antisense inhibition
CC   of human superoxide dismutase 1 expression by chimeric phosphorothioate
CC   oligonucleotides having 2'-methoxyethyl (2'-MOE) wings and a deoxy gap.
CC   Compounds of the invention are useful for inhibiting the expression of
CC   human superoxide dismutase 1 in human cells or tissues, and for treating
CC   a disease or condition associated with this enzyme (antisense therapy),
CC   especially amyotrophic lateral sclerosis, a disease or condition arising
CC   from aberrant apoptosis and a hyperproliferative disorder. It may also be
CC   used in diagnostics, therapeutics and as a research reagent, e.g.
CC   prophylactically to prevent or delay infection, inflammation or tumour
CC   formation. Sequences given in records ACC40880-ACC40957 represent human
CC   superoxide dismutase 1 antisense inhibitor oligonucleotides
XX
SQ   Sequence 20 BP; 4 A; 7 C; 5 G; 4 T; 0 U; 0 Other;

  Query Match             2.3%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 60;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy         53 GCCTAGCGAGTTATGGCGAC 72
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Db         20 GCCTAGCGAGTTATGGCGAC 1


RESULT 91
ACC40891/c
ID   ACC40891 standard; DNA; 20 BP.
XX
AC   ACC40891;
XX
DT   23-MAY-2003  (first entry)
XX
DE   Human superoxide dismutase 1 antisense inhibitor # ISIS 150445.
XX
KW   Human; superoxide dismutase 1; antisense; neuroprotective; cytostatic;
KW   antiinflammatory; amyotrophic lateral sclerosis; apoptosis;
KW   hyperproliferative disorder; therapy; infection; inflammation; tumour;
KW   ss.
XX
OS   Homo sapiens.
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   modified_base   1. .20
FT                   /*tag=  a
FT                   /mod_base= OTHER
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FT                   /note= "Phosphorothioate linkages. All cytosines are 5-
FT                   methylcytosine"
FT   modified_base   1. .5
FT                   /*tag=  b
FT                   /mod_base= OTHER
FT                   /note= "2'-methoxyethyl (2'-MOE) nucleotides"
FT   modified_base   16. .20
FT                   /*tag=  c
FT                   /mod_base= OTHER
FT                   /note= "2'-methoxyethyl (2'-MOE) nucleotides"
XX
PN   WO2003000707-A2.
XX
PD   03-JAN-2003.
XX
PF   19-JUN-2002; 2002WO-US019664.
XX
PR   21-JUN-2001; 2001US-00888360.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Bennett FC,  Dobie K;
XX
DR   WPI; 2003-184032/18.
XX
PT   Novel antisense compounds targeted to nucleic acids encoding human
PT   superoxide dismutase 1, for modulating expression of the dismutase and
PT   treating diseases or conditions, e.g. amyotrophic lateral sclerosis.
XX
PS   Claim 3; Page 76; 107pp; English.
XX
CC   The invention relates to a compound of 8-50 nucleobases in length,
CC   targeted to a nucleic acid molecule encoding human superoxide dismutase
CC   1. The compound specifically hybridises with and inhibits the expression
CC   of human superoxide dismutase 1 by hybridising with at least an 8-
CC   nucleobase portion of the nucleic acid molecule encoding the active site
CC   of the enzyme. The activity of compounds of the invention may be
CC   described as neuroprotective, cytostatic and antiinflammatory. The
CC   mechanism of action of compounds of the invention is antisense inhibition
CC   of human superoxide dismutase 1 expression by chimeric phosphorothioate
CC   oligonucleotides having 2'-methoxyethyl (2'-MOE) wings and a deoxy gap.
CC   Compounds of the invention are useful for inhibiting the expression of
CC   human superoxide dismutase 1 in human cells or tissues, and for treating
CC   a disease or condition associated with this enzyme (antisense therapy),
CC   especially amyotrophic lateral sclerosis, a disease or condition arising
CC   from aberrant apoptosis and a hyperproliferative disorder. It may also be
CC   used in diagnostics, therapeutics and as a research reagent, e.g.
CC   prophylactically to prevent or delay infection, inflammation or tumour
CC   formation. Sequences given in records ACC40880-ACC40957 represent human
CC   superoxide dismutase 1 antisense inhibitor oligonucleotides
XX
SQ   Sequence 20 BP; 3 A; 7 C; 2 G; 8 T; 0 U; 0 Other;

  Query Match             2.3%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 60;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        135 AGGAAAGTAATGGACCAGTG 154
              ||||||||||||||||||||
Db         20 AGGAAAGTAATGGACCAGTG 1


RESULT 92
ACC40917/c
ID   ACC40917 standard; DNA; 20 BP.
XX
AC   ACC40917;
XX
DT   23-MAY-2003  (first entry)
XX
DE   Human superoxide dismutase 1 antisense inhibitor # ISIS 150471.
XX
KW   Human; superoxide dismutase 1; antisense; neuroprotective; cytostatic;
KW   antiinflammatory; amyotrophic lateral sclerosis; apoptosis;
KW   hyperproliferative disorder; therapy; infection; inflammation; tumour;
KW   ss.
XX
OS   Homo sapiens.
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   modified_base   1. .20
FT                   /*tag=  a
FT                   /mod_base= OTHER
FT                   /note= "Phosphorothioate linkages. All cytosines are 5-
FT                   methylcytosine"
FT   modified_base   1. .5
FT                   /*tag=  b
FT                   /mod_base= OTHER
FT                   /note= "2'-methoxyethyl (2'-MOE) nucleotides"
FT   modified_base   16. .20
FT                   /*tag=  c
FT                   /mod_base= OTHER
FT                   /note= "2'-methoxyethyl (2'-MOE) nucleotides"
XX
PN   WO2003000707-A2.
XX
PD   03-JAN-2003.
XX
PF   19-JUN-2002; 2002WO-US019664.
XX
PR   21-JUN-2001; 2001US-00888360.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Bennett FC,  Dobie K;
XX
DR   WPI; 2003-184032/18.
XX
PT   Novel antisense compounds targeted to nucleic acids encoding human
PT   superoxide dismutase 1, for modulating expression of the dismutase and
PT   treating diseases or conditions, e.g. amyotrophic lateral sclerosis.
XX
PS   Example 15; Page 77; 107pp; English.
XX
CC   The invention relates to a compound of 8-50 nucleobases in length,
CC   targeted to a nucleic acid molecule encoding human superoxide dismutase
CC   1. The compound specifically hybridises with and inhibits the expression
CC   of human superoxide dismutase 1 by hybridising with at least an 8-
CC   nucleobase portion of the nucleic acid molecule encoding the active site
CC   of the enzyme. The activity of compounds of the invention may be
CC   described as neuroprotective, cytostatic and antiinflammatory. The
CC   mechanism of action of compounds of the invention is antisense inhibition
CC   of human superoxide dismutase 1 expression by chimeric phosphorothioate
CC   oligonucleotides having 2'-methoxyethyl (2'-MOE) wings and a deoxy gap.
CC   Compounds of the invention are useful for inhibiting the expression of
CC   human superoxide dismutase 1 in human cells or tissues, and for treating
CC   a disease or condition associated with this enzyme (antisense therapy),
CC   especially amyotrophic lateral sclerosis, a disease or condition arising
CC   from aberrant apoptosis and a hyperproliferative disorder. It may also be
CC   used in diagnostics, therapeutics and as a research reagent, e.g.
CC   prophylactically to prevent or delay infection, inflammation or tumour
CC   formation. Sequences given in records ACC40880-ACC40957 represent human
CC   superoxide dismutase 1 antisense inhibitor oligonucleotides
XX
SQ   Sequence 20 BP; 7 A; 5 C; 1 G; 7 T; 0 U; 0 Other;

  Query Match             2.3%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 60;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        670 GTAGTGAGAAACTGATTTAT 689
              ||||||||||||||||||||
Db         20 GTAGTGAGAAACTGATTTAT 1
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```
RESULT 93
ACC40922/c
ID   ACC40922 standard; DNA; 20 BP.
XX
AC   ACC40922;
XX
DT   23-MAY-2003  (first entry)
XX
DE   Human superoxide dismutase 1 antisense inhibitor # ISIS 150476.
XX
KW   Human; superoxide dismutase 1; antisense; neuroprotective; cytostatic;
KW   antiinflammatory; amyotrophic lateral sclerosis; apoptosis;
KW   hyperproliferative disorder; therapy; infection; inflammation; tumour;
KW   ss.
XX
OS   Homo sapiens.
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   modified_base   1. .20
FT                   /*tag=  a
FT                   /mod_base= OTHER
FT                   /note= "Phosphorothioate linkages. All cytosines are 5-
FT                   methylcytosine"
FT   modified_base   1. .5
FT                   /*tag=  b
FT                   /mod_base= OTHER
FT                   /note= "2'-methoxyethyl (2'-MOE) nucleotides"
FT   modified_base   16. .20
FT                   /*tag=  c
FT                   /mod_base= OTHER
FT                   /note= "2'-methoxyethyl (2'-MOE) nucleotides"
XX
PN   WO2003000707-A2.
XX
PD   03-JAN-2003.
XX
PF   19-JUN-2002; 2002WO-US019664.
XX
PR   21-JUN-2001; 2001US-00888360.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Bennett FC,  Dobie K;
XX
DR   WPI; 2003-184032/18.
XX
PT   Novel antisense compounds targeted to nucleic acids encoding human
PT   superoxide dismutase 1, for modulating expression of the dismutase and
PT   treating diseases or conditions, e.g. amyotrophic lateral sclerosis.
XX
PS   Example 15; Page 77; 107pp; English.
XX
CC   The invention relates to a compound of 8-50 nucleobases in length,
CC   targeted to a nucleic acid molecule encoding human superoxide dismutase
CC   1. The compound specifically hybridises with and inhibits the expression
CC   of human superoxide dismutase 1 by hybridising with at least an 8-
CC   nucleobase portion of the nucleic acid molecule encoding the active site
CC   of the enzyme. The activity of compounds of the invention may be
CC   described as neuroprotective, cytostatic and antiinflammatory. The
CC   mechanism of action of compounds of the invention is antisense inhibition
CC   of human superoxide dismutase 1 expression by chimeric phosphorothioate
CC   oligonucleotides having 2'-methoxyethyl (2'-MOE) wings and a deoxy gap.
CC   Compounds of the invention are useful for inhibiting the expression of
CC   human superoxide dismutase 1 in human cells or tissues, and for treating
CC   a disease or condition associated with this enzyme (antisense therapy),
CC   especially amyotrophic lateral sclerosis, a disease or condition arising
CC   from aberrant apoptosis and a hyperproliferative disorder. It may also be
CC   used in diagnostics, therapeutics and as a research reagent, e.g.
CC   prophylactically to prevent or delay infection, inflammation or tumour
CC   formation. Sequences given in records ACC40880-ACC40957 represent human
CC   superoxide dismutase 1 antisense inhibitor oligonucleotides
XX
SQ   Sequence 20 BP; 9 A; 2 C; 2 G; 7 T; 0 U; 0 Other;

  Query Match           2.3%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity  100.0%;  Pred. No. 60;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        710 TAGTTTTATAAAACTCAGTT 729
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Db         20 TAGTTTTATAAAACTCAGTT 1


RESULT 94
ACC40923/c
ID   ACC40923 standard; DNA; 20 BP.
XX
AC   ACC40923;
XX
DT   23-MAY-2003  (first entry)
XX
DE   Human superoxide dismutase 1 antisense inhibitor # ISIS 150477.
XX
KW   Human; superoxide dismutase 1; antisense; neuroprotective; cytostatic;
KW   antiinflammatory; amyotrophic lateral sclerosis; apoptosis;
KW   hyperproliferative disorder; therapy; infection; inflammation; tumour;
KW   ss.
XX
OS   Homo sapiens.
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   modified_base   1. .20
FT                   /*tag=  a
FT                   /mod_base= OTHER
FT                   /note= "Phosphorothioate linkages. All cytosines are 5-
FT                   methylcytosine"
FT   modified_base   1. .5
FT                   /*tag=  b
FT                   /mod_base= OTHER
FT                   /note= "2'-methoxyethyl (2'-MOE) nucleotides"
FT   modified_base   16. .20
FT                   /*tag=  c
FT                   /mod_base= OTHER
FT                   /note= "2'-methoxyethyl (2'-MOE) nucleotides"
XX
PN   WO2003000707-A2.
XX
PD   03-JAN-2003.
XX
PF   19-JUN-2002; 2002WO-US019664.
XX
PR   21-JUN-2001; 2001US-00888360.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Bennett FC,  Dobie K;
XX
DR   WPI; 2003-184032/18.
XX
PT   Novel antisense compounds targeted to nucleic acids encoding human
PT   superoxide dismutase 1, for modulating expression of the dismutase and
PT   treating diseases or conditions, e.g. amyotrophic lateral sclerosis.
XX
PS   Example 15; Page 77; 107pp; English.
XX
CC   The invention relates to a compound of 8-50 nucleobases in length,
CC   targeted to a nucleic acid molecule encoding human superoxide dismutase
CC   1. The compound specifically hybridises with and inhibits the expression
CC   of human superoxide dismutase 1 by hybridising with at least an 8-
CC   nucleobase portion of the nucleic acid molecule encoding the active site
CC   of the enzyme. The activity of compounds of the invention may be
CC   described as neuroprotective, cytostatic and antiinflammatory. The
CC   mechanism of action of compounds of the invention is antisense inhibition
CC   of human superoxide dismutase 1 expression by chimeric phosphorothioate
```

```
CC   oligonucleotides having 2'-methoxyethyl (2'-MOE) wings and a deoxy gap.
CC   Compounds of the invention are useful for inhibiting the expression of
CC   human superoxide dismutase 1 in human cells or tissues, and for treating
CC   a disease or condition associated with this enzyme (antisense therapy),
CC   especially amyotrophic lateral sclerosis, a disease or condition arising
CC   from aberrant apoptosis and a hyperproliferative disorder. It may also be
CC   used in diagnostics, therapeutics and as a research reagent, e.g.
CC   prophylactically to prevent or delay infection, inflammation or tumour
CC   formation. Sequences given in records ACC40880-ACC40957 represent human
CC   superoxide dismutase 1 antisense inhibitor oligonucleotides
XX
SQ   Sequence 20 BP; 7 A; 3 C; 3 G; 7 T; 0 U; 0 Other;

  Query Match             2.3%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 60;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        721 AACTCAGTTAAAATGTCTGT 740
              ||||||||||||||||||||
Db         20 AACTCAGTTAAAATGTCTGT 1


RESULT 95
ACC40935/c
ID   ACC40935 standard; DNA; 20 BP.
XX
AC   ACC40935;
XX
DT   23-MAY-2003  (first entry)
XX
DE   Human superoxide dismutase 1 antisense inhibitor # ISIS 150489.
XX
KW   Human; superoxide dismutase 1; antisense; neuroprotective; cytostatic;
KW   antiinflammatory; amyotrophic lateral sclerosis; apoptosis;
KW   hyperproliferative disorder; therapy; infection; inflammation; tumour;
KW   ss.
XX
OS   Homo sapiens.
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   modified_base   1. .20
FT                   /*tag=  a
FT                   /mod_base= OTHER
FT                   /note= "Phosphorothioate linkages. All cytosines are 5-
FT                   methylcytosine"
FT   modified_base   1. .5
FT                   /*tag=  b
FT                   /mod_base= OTHER
FT                   /note= "2'-methoxyethyl (2'-MOE) nucleotides"
FT   modified_base   16. .20
FT                   /*tag=  c
FT                   /mod_base= OTHER
FT                   /note= "2'-methoxyethyl (2'-MOE) nucleotides"
XX
PN   WO2003000707-A2.
XX
PD   03-JAN-2003.
XX
PF   19-JUN-2002; 2002WO-US019664.
XX
PR   21-JUN-2001; 2001US-00888360.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Bennett FC,  Dobie K;
XX
DR   WPI; 2003-184032/18.
XX
PT   Novel antisense compounds targeted to nucleic acids encoding human
PT   superoxide dismutase 1, for modulating expression of the dismutase and
PT   treating diseases or conditions, e.g. amyotrophic lateral sclerosis.
XX
PS   Example 15; Page 77; 107pp; English.
XX
CC   The invention relates to a compound of 8-50 nucleobases in length,
CC   targeted to a nucleic acid molecule encoding human superoxide dismutase
CC   1. The compound specifically hybridises with and inhibits the expression
CC   of human superoxide dismutase 1 by hybridising with at least an 8-
CC   nucleobase portion of the nucleic acid molecule encoding the active site
CC   of the enzyme. The activity of compounds of the invention may be
CC   described as neuroprotective, cytostatic and antiinflammatory. The
CC   mechanism of action of compounds of the invention is antisense inhibition
CC   of human superoxide dismutase 1 expression by chimeric phosphorothioate
CC   oligonucleotides having 2'-methoxyethyl (2'-MOE) wings and a deoxy gap.
CC   Compounds of the invention are useful for inhibiting the expression of
CC   human superoxide dismutase 1 in human cells or tissues, and for treating
CC   a disease or condition associated with this enzyme (antisense therapy),
CC   especially amyotrophic lateral sclerosis, a disease or condition arising
CC   from aberrant apoptosis and a hyperproliferative disorder. It may also be
CC   used in diagnostics, therapeutics and as a research reagent, e.g.
CC   prophylactically to prevent or delay infection, inflammation or tumour
CC   formation. Sequences given in records ACC40880-ACC40957 represent human
CC   superoxide dismutase 1 antisense inhibitor oligonucleotides
XX
SQ   Sequence 20 BP; 4 A; 3 C; 5 G; 8 T; 0 U; 0 Other;

  Query Match             2.3%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 60;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        814 AGCCTGTGAATAAAAACCCT 833
              ||||||||||||||||||||
Db         20 AGCCTGTGAATAAAAACCCT 1


RESULT 96
ACC40881/c
ID   ACC40881 standard; DNA; 20 BP.
XX
AC   ACC40881;
XX
DT   23-MAY-2003  (first entry)
XX
DE   Human superoxide dismutase 1 antisense inhibitor # ISIS 146144.
XX
KW   Human; superoxide dismutase 1; antisense; neuroprotective; cytostatic;
KW   antiinflammatory; amyotrophic lateral sclerosis; apoptosis;
KW   hyperproliferative disorder; therapy; infection; inflammation; tumour;
KW   ss.
XX
OS   Homo sapiens.
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   modified_base   1. .20
FT                   /*tag=  a
FT                   /mod_base= OTHER
FT                   /note= "Phosphorothioate linkages. All cytosines are 5-
FT                   methylcytosine"
FT   modified_base   1. .5
FT                   /*tag=  b
FT                   /mod_base= OTHER
FT                   /note= "2'-methoxyethyl (2'-MOE) nucleotides"
FT   modified_base   16. .20
FT                   /*tag=  c
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FT                   /note= "2'-methoxyethyl (2'-MOE) nucleotides"
XX
PN   WO2003000707-A2.
XX
PD   03-JAN-2003.
XX
PF   19-JUN-2002; 2002WO-US019664.
XX
PR   21-JUN-2001; 2001US-00888360.
```

```
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Bennett FC,  Dobie K;
XX
DR   WPI; 2003-184032/18.
XX
PT   Novel antisense compounds targeted to nucleic acids encoding human
PT   superoxide dismutase 1, for modulating expression of the dismutase and
PT   treating diseases or conditions, e.g. amyotrophic lateral sclerosis.
XX
PS   Example 15; Page 76; 107pp; English.
XX
CC   The invention relates to a compound of 8-50 nucleobases in length,
CC   targeted to a nucleic acid molecule encoding human superoxide dismutase
CC   1. The compound specifically hybridises with and inhibits the expression
CC   of human superoxide dismutase 1 by hybridising with at least an 8-
CC   nucleobase portion of the nucleic acid molecule encoding the active site
CC   of the enzyme. The activity of compounds of the invention may be
CC   described as neuroprotective, cytostatic and antiinflammatory. The
CC   mechanism of action of compounds of the invention is antisense inhibition
CC   of human superoxide dismutase 1 expression by chimeric phosphorothioate
CC   oligonucleotides having 2'-methoxyethyl (2'-MOE) wings and a deoxy gap.
CC   Compounds of the invention are useful for inhibiting the expression of
CC   human superoxide dismutase 1 in human cells or tissues, and for treating
CC   a disease or condition associated with this enzyme (antisense therapy),
CC   especially amyotrophic lateral sclerosis, a disease or condition arising
CC   from aberrant apoptosis and a hyperproliferative disorder. It may also be
CC   used in diagnostics, therapeutics and as a research reagent, e.g.
CC   prophylactically to prevent or delay infection, inflammation or tumour
CC   formation. Sequences given in records ACC40880-ACC40957 represent human
CC   superoxide dismutase 1 antisense inhibitor oligonucleotides
XX
SQ   Sequence 20 BP; 4 A; 9 C; 5 G; 2 T; 0 U; 0 Other;

  Query Match             2.3%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 60;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy         78 CCGTGTGCGTGCTGAAGGGC 97
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Db         20 CCGTGTGCGTGCTGAAGGGC 1


RESULT 97
ACC40890/c
ID   ACC40890 standard; DNA; 20 BP.
XX
AC   ACC40890;
XX
DT   23-MAY-2003  (first entry)
XX
DE   Human superoxide dismutase 1 antisense inhibitor # ISIS 150444.
XX
KW   Human; superoxide dismutase 1; antisense; neuroprotective; cytostatic;
KW   antiinflammatory; amyotrophic lateral sclerosis; apoptosis;
KW   hyperproliferative disorder; therapy; infection; inflammation; tumour;
KW   ss.
XX
OS   Homo sapiens.
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   modified_base   1. .20
FT                   /*tag=  a
FT                   /mod_base= OTHER
FT                   /note= "Phosphorothioate linkages. All cytosines are 5-
FT                   methylcytosine"
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FT                   /*tag=  b
FT                   /mod_base= OTHER
FT                   /note= "2'-methoxyethyl (2'-MOE) nucleotides"
FT   modified_base   16. .20
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XX
PN   WO2003000707-A2.
XX
PD   03-JAN-2003.
XX
PF   19-JUN-2002; 2002WO-US019664.
XX
PR   21-JUN-2001; 2001US-00888360.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Bennett FC,  Dobie K;
XX
DR   WPI; 2003-184032/18.
XX
PT   Novel antisense compounds targeted to nucleic acids encoding human
PT   superoxide dismutase 1, for modulating expression of the dismutase and
PT   treating diseases or conditions, e.g. amyotrophic lateral sclerosis.
XX
PS   Claim 3; Page 76; 107pp; English.
XX
CC   The invention relates to a compound of 8-50 nucleobases in length,
CC   targeted to a nucleic acid molecule encoding human superoxide dismutase
CC   1. The compound specifically hybridises with and inhibits the expression
CC   of human superoxide dismutase 1 by hybridising with at least an 8-
CC   nucleobase portion of the nucleic acid molecule encoding the active site
CC   of the enzyme. The activity of compounds of the invention may be
CC   described as neuroprotective, cytostatic and antiinflammatory. The
CC   mechanism of action of compounds of the invention is antisense inhibition
CC   of human superoxide dismutase 1 expression by chimeric phosphorothioate
CC   oligonucleotides having 2'-methoxyethyl (2'-MOE) wings and a deoxy gap.
CC   Compounds of the invention are useful for inhibiting the expression of
CC   human superoxide dismutase 1 in human cells or tissues, and for treating
CC   a disease or condition associated with this enzyme (antisense therapy),
CC   especially amyotrophic lateral sclerosis, a disease or condition arising
CC   from aberrant apoptosis and a hyperproliferative disorder. It may also be
CC   used in diagnostics, therapeutics and as a research reagent, e.g.
CC   prophylactically to prevent or delay infection, inflammation or tumour
CC   formation. Sequences given in records ACC40880-ACC40957 represent human
CC   superoxide dismutase 1 antisense inhibitor oligonucleotides
XX
SQ   Sequence 20 BP; 5 A; 5 C; 4 G; 6 T; 0 U; 0 Other;

  Query Match             2.3%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 60;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        106 AGTGCAGGGCATCATCAATT 125
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Db         20 AGTGCAGGGCATCATCAATT 1


RESULT 98
ACC40906/c
ID   ACC40906 standard; DNA; 20 BP.
XX
AC   ACC40906;
XX
DT   23-MAY-2003  (first entry)
XX
DE   Human superoxide dismutase 1 antisense inhibitor # ISIS 150460.
XX
KW   Human; superoxide dismutase 1; antisense; neuroprotective; cytostatic;
KW   antiinflammatory; amyotrophic lateral sclerosis; apoptosis;
KW   hyperproliferative disorder; therapy; infection; inflammation; tumour;
KW   ss.
XX
OS   Homo sapiens.
OS   Synthetic.
XX
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FH   Key             Location/Qualifiers
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FT                   /*tag=  a
FT                   /mod_base= OTHER
FT                   /note= "Phosphorothioate linkages. All cytosines are 5-
FT                   methylcytosine"
FT   modified_base   1. .5
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FT                   /mod_base= OTHER
FT                   /note= "2'-methoxyethyl (2'-MOE) nucleotides"
FT   modified_base   16. .20
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FT                   /mod_base= OTHER
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XX
PN   WO2003000707-A2.
XX
PD   03-JAN-2003.
XX
PF   19-JUN-2002; 2002WO-US019664.
XX
PR   21-JUN-2001; 2001US-00888360.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Bennett FC,  Dobie K;
XX
DR   WPI; 2003-184032/18.
XX
PT   Novel antisense compounds targeted to nucleic acids encoding human
PT   superoxide dismutase 1, for modulating expression of the dismutase and
PT   treating diseases or conditions, e.g. amyotrophic lateral sclerosis.
XX
PS   Example 15; Page 77; 107pp; English.
XX
CC   The invention relates to a compound of 8-50 nucleobases in length,
CC   targeted to a nucleic acid molecule encoding human superoxide dismutase
CC   1. The compound specifically hybridises with and inhibits the expression
CC   of human superoxide dismutase 1 by hybridising with at least an 8-
CC   nucleobase portion of the nucleic acid molecule encoding the active site
CC   of the enzyme. The activity of compounds of the invention may be
CC   described as neuroprotective, cytostatic and antiinflammatory. The
CC   mechanism of action of compounds of the invention is antisense inhibition
CC   of human superoxide dismutase 1 expression by chimeric phosphorothioate
CC   oligonucleotides having 2'-methoxyethyl (2'-MOE) wings and a deoxy gap.
CC   Compounds of the invention are useful for inhibiting the expression of
CC   human superoxide dismutase 1 in human cells or tissues, and for treating
CC   a disease or condition associated with this enzyme (antisense therapy),
CC   especially amyotrophic lateral sclerosis, a disease or condition arising
CC   from aberrant apoptosis and a hyperproliferative disorder. It may also be
CC   used in diagnostics, therapeutics and as a research reagent, e.g.
CC   prophylactically to prevent or delay infection, inflammation or tumour
CC   formation. Sequences given in records ACC40880-ACC40957 represent human
CC   superoxide dismutase 1 antisense inhibitor oligonucleotides
XX
SQ   Sequence 20 BP; 5 A; 7 C; 5 G; 3 T; 0 U; 0 Other;

  Query Match             2.3%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 60;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        404 ATTGGCCGCACACTGGTGGT 423
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Db         20 ATTGGCCGCACACTGGTGGT 1


RESULT 99
ACC40910/c
ID   ACC40910 standard; DNA; 20 BP.
XX
AC   ACC40910;
XX
DT   23-MAY-2003  (first entry)
XX
DE   Human superoxide dismutase 1 antisense inhibitor # ISIS 150464.
XX
KW   Human; superoxide dismutase 1; antisense; neuroprotective; cytostatic;
KW   antiinflammatory; amyotrophic lateral sclerosis; apoptosis;
KW   hyperproliferative disorder; therapy; infection; inflammation; tumour;
KW   ss.
XX
OS   Homo sapiens.
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   modified_base   1. .20
FT                   /*tag=  a
FT                   /mod_base= OTHER
FT                   /note= "Phosphorothioate linkages. All cytosines are 5-
FT                   methylcytosine"
FT   modified_base   1. .5
FT                   /*tag=  b
FT                   /mod_base= OTHER
FT                   /note= "2'-methoxyethyl (2'-MOE) nucleotides"
FT   modified_base   16. .20
FT                   /*tag=  c
FT                   /mod_base= OTHER
FT                   /note= "2'-methoxyethyl (2'-MOE) nucleotides"
XX
PN   WO2003000707-A2.
XX
PD   03-JAN-2003.
XX
PF   19-JUN-2002; 2002WO-US019664.
XX
PR   21-JUN-2001; 2001US-00888360.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Bennett FC,  Dobie K;
XX
DR   WPI; 2003-184032/18.
XX
PT   Novel antisense compounds targeted to nucleic acids encoding human
PT   superoxide dismutase 1, for modulating expression of the dismutase and
PT   treating diseases or conditions, e.g. amyotrophic lateral sclerosis.
XX
PS   Claim 3; Page 77; 107pp; English.
XX
CC   The invention relates to a compound of 8-50 nucleobases in length,
CC   targeted to a nucleic acid molecule encoding human superoxide dismutase
CC   1. The compound specifically hybridises with and inhibits the expression
CC   of human superoxide dismutase 1 by hybridising with at least an 8-
CC   nucleobase portion of the nucleic acid molecule encoding the active site
CC   of the enzyme. The activity of compounds of the invention may be
CC   described as neuroprotective, cytostatic and antiinflammatory. The
CC   mechanism of action of compounds of the invention is antisense inhibition
CC   of human superoxide dismutase 1 expression by chimeric phosphorothioate
CC   oligonucleotides having 2'-methoxyethyl (2'-MOE) wings and a deoxy gap.
CC   Compounds of the invention are useful for inhibiting the expression of
CC   human superoxide dismutase 1 in human cells or tissues, and for treating
CC   a disease or condition associated with this enzyme (antisense therapy),
CC   especially amyotrophic lateral sclerosis, a disease or condition arising
CC   from aberrant apoptosis and a hyperproliferative disorder. It may also be
CC   used in diagnostics, therapeutics and as a research reagent, e.g.
CC   prophylactically to prevent or delay infection, inflammation or tumour
CC   formation. Sequences given in records ACC40880-ACC40957 represent human
CC   superoxide dismutase 1 antisense inhibitor oligonucleotides
XX
SQ   Sequence 20 BP; 4 A; 2 C; 7 G; 7 T; 0 U; 0 Other;

  Query Match             2.3%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 60;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        517 GATCGCCCAATAAACATTCC 536
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Db          20 GATCGCCCAATAAACATTCC 1

RESULT 100
ACC40933/c
ID   ACC40933 standard; DNA; 20 BP.
XX
AC   ACC40933;
XX
DT   23-MAY-2003  (first entry)
XX
DE   Human superoxide dismutase 1 antisense inhibitor # ISIS 150487.
XX
KW   Human; superoxide dismutase 1; antisense; neuroprotective; cytostatic;
KW   antiinflammatory; amyotrophic lateral sclerosis; apoptosis;
KW   hyperproliferative disorder; therapy; infection; inflammation; tumour;
KW   ss.
XX
OS   Homo sapiens.
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   modified_base   1. .20
FT                   /*tag=  a
FT                   /mod_base= OTHER
FT                   /note= "Phosphorothioate linkages. All cytosines are 5-
FT                   methylcytosine"
FT   modified_base   1. .5
FT                   /*tag=  b
FT                   /mod_base= OTHER
FT                   /note= "2'-methoxyethyl (2'-MOE) nucleotides"
FT   modified_base   16. .20
FT                   /*tag=  c
FT                   /mod_base= OTHER
FT                   /note= "2'-methoxyethyl (2'-MOE) nucleotides"
XX
PN   WO2003000707-A2.
XX
PD   03-JAN-2003.
XX
PF   19-JUN-2002; 2002WO-US019664.
XX
PR   21-JUN-2001; 2001US-00888360.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Bennett FC,  Dobie K;
XX
DR   WPI; 2003-184032/18.
XX
PT   Novel antisense compounds targeted to nucleic acids encoding human
PT   superoxide dismutase 1, for modulating expression of the dismutase and
PT   treating diseases or conditions, e.g. amyotrophic lateral sclerosis.
XX
PS   Example 15; Page 77; 107pp; English.
XX
CC   The invention relates to a compound of 8-50 nucleobases in length,
CC   targeted to a nucleic acid molecule encoding human superoxide dismutase
CC   1. The compound specifically hybridises with and inhibits the expression
CC   of human superoxide dismutase 1 by hybridising with at least an 8-
CC   nucleobase portion of the nucleic acid molecule encoding the active site
CC   of the enzyme. The activity of compounds of the invention may be
CC   described as neuroprotective, cytostatic and antiinflammatory. The
CC   mechanism of action of compounds of the invention is antisense inhibition
CC   of human superoxide dismutase 1 expression by chimeric phosphorothioate
CC   oligonucleotides having 2'-methoxyethyl (2'-MOE) wings and a deoxy gap.
CC   Compounds of the invention are useful for inhibiting the expression of
CC   human superoxide dismutase 1 in human cells or tissues, and for treating
CC   a disease or condition associated with this enzyme (antisense therapy),
CC   especially amyotrophic lateral sclerosis, a disease or condition arising
CC   from aberrant apoptosis and a hyperproliferative disorder. It may also be
CC   used in diagnostics, therapeutics and as a research reagent, e.g.
CC   prophylactically to prevent or delay infection, inflammation or tumour
CC   formation. Sequences given in records ACC40880-ACC40957 represent human
CC   superoxide dismutase 1 antisense inhibitor oligonucleotides
XX
SQ   Sequence 20 BP; 7 A; 4 C; 4 G; 5 T; 0 U; 0 Other;

  Query Match             2.3%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 60;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        805 TGTCATTCAAGCCTGTGAAT 824
                ||||||||||||||||||||
Db         20 TGTCATTCAAGCCTGTGAAT 1


RESULT 101
ACC40880/c
ID   ACC40880 standard; DNA; 20 BP.
XX
AC   ACC40880;
XX
DT   23-MAY-2003  (first entry)
XX
DE   Human superoxide dismutase 1 antisense inhibitor # ISIS 146143.
XX
KW   Human; superoxide dismutase 1; antisense; neuroprotective; cytostatic;
KW   antiinflammatory; amyotrophic lateral sclerosis; apoptosis;
KW   hyperproliferative disorder; therapy; infection; inflammation; tumour;
KW   ss.
XX
OS   Homo sapiens.
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   modified_base   1. .20
FT                   /*tag=  a
FT                   /mod_base= OTHER
FT                   /note= "Phosphorothioate linkages. All cytosines are 5-
FT                   methylcytosine"
FT   modified_base   1. .5
FT                   /*tag=  b
FT                   /mod_base= OTHER
FT                   /note= "2'-methoxyethyl (2'-MOE) nucleotides"
FT   modified_base   16. .20
FT                   /*tag=  c
FT                   /mod_base= OTHER
FT                   /note= "2'-methoxyethyl (2'-MOE) nucleotides"
XX
PN   WO2003000707-A2.
XX
PD   03-JAN-2003.
XX
PF   19-JUN-2002; 2002WO-US019664.
XX
PR   21-JUN-2001; 2001US-00888360.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Bennett FC,  Dobie K;
XX
DR   WPI; 2003-184032/18.
XX
PT   Novel antisense compounds targeted to nucleic acids encoding human
PT   superoxide dismutase 1, for modulating expression of the dismutase and
PT   treating diseases or conditions, e.g. amyotrophic lateral sclerosis.
XX
PS   Claim 3; Page 76; 107pp; English.
XX
CC   The invention relates to a compound of 8-50 nucleobases in length,
CC   targeted to a nucleic acid molecule encoding human superoxide dismutase
CC   1. The compound specifically hybridises with and inhibits the expression
CC   of human superoxide dismutase 1 by hybridising with at least an 8-
CC   nucleobase portion of the nucleic acid molecule encoding the active site
```

```
CC   of the enzyme. The activity of compounds of the invention may be
CC   described as neuroprotective, cytostatic and antiinflammatory. The
CC   mechanism of action of compounds of the invention is antisense inhibition
CC   of human superoxide dismutase 1 expression by chimeric phosphorothioate
CC   oligonucleotides having 2'-methoxyethyl (2'-MOE) wings and a deoxy gap.
CC   Compounds of the invention are useful for inhibiting the expression of
CC   human superoxide dismutase 1 in human cells or tissues, and for treating
CC   a disease or condition associated with this enzyme (antisense therapy),
CC   especially amyotrophic lateral sclerosis, a disease or condition arising
CC   from aberrant apoptosis and a hyperproliferative disorder. It may also be
CC   used in diagnostics, therapeutics and as a research reagent, e.g.
CC   prophylactically to prevent or delay infection, inflammation or tumour
CC   formation. Sequences given in records ACC40880-ACC40957 represent human
CC   superoxide dismutase 1 antisense inhibitor oligonucleotides
XX
SQ   Sequence 20 BP; 4 A; 9 C; 4 G; 3 T; 0 U; 0 Other;

  Query Match             2.3%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 60;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy         73 GAAGGCCGTGTGCGTGCTGA 92
              ||||||||||||||||||||
Db         20 GAAGGCCGTGTGCGTGCTGA 1


RESULT 102
ACC40907/c
ID   ACC40907 standard; DNA; 20 BP.
XX
AC   ACC40907;
XX
DT   23-MAY-2003  (first entry)
XX
DE   Human superoxide dismutase 1 antisense inhibitor # ISIS 150461.
XX
KW   Human; superoxide dismutase 1; antisense; neuroprotective; cytostatic;
KW   antiinflammatory; amyotrophic lateral sclerosis; apoptosis;
KW   hyperproliferative disorder; therapy; infection; inflammation; tumour;
KW   ss.
XX
OS   Homo sapiens.
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   modified_base   1. .20
FT                   /*tag=  a
FT                   /mod_base= OTHER
FT                   /note= "Phosphorothioate linkages. All cytosines are 5-
FT                   methylcytosine"
FT   modified_base   1. .5
FT                   /*tag=  b
FT                   /mod_base= OTHER
FT                   /note= "2'-methoxyethyl (2'-MOE) nucleotides"
FT   modified_base   16. .20
FT                   /*tag=  c
FT                   /mod_base= OTHER
FT                   /note= "2'-methoxyethyl (2'-MOE) nucleotides"
XX
PN   WO2003000707-A2.
XX
PD   03-JAN-2003.
XX
PF   19-JUN-2002; 2002WO-US019664.
XX
PR   21-JUN-2001; 2001US-00888360.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Bennett FC,  Dobie K;
XX
DR   WPI; 2003-184032/18.
XX
PT   Novel antisense compounds targeted to nucleic acids encoding human
PT   superoxide dismutase 1, for modulating expression of the dismutase and
PT   treating diseases or conditions, e.g. amyotrophic lateral sclerosis.
XX
PS   Claim 3; Page 77; 107pp; English.
XX
CC   The invention relates to a compound of 8-50 nucleobases in length,
CC   targeted to a nucleic acid molecule encoding human superoxide dismutase
CC   1. The compound specifically hybridises with and inhibits the expression
CC   of human superoxide dismutase 1 by hybridising with at least an 8-
CC   nucleobase portion of the nucleic acid molecule encoding the active site
CC   of the enzyme. The activity of compounds of the invention may be
CC   described as neuroprotective, cytostatic and antiinflammatory. The
CC   mechanism of action of compounds of the invention is antisense inhibition
CC   of human superoxide dismutase 1 expression by chimeric phosphorothioate
CC   oligonucleotides having 2'-methoxyethyl (2'-MOE) wings and a deoxy gap.
CC   Compounds of the invention are useful for inhibiting the expression of
CC   human superoxide dismutase 1 in human cells or tissues, and for treating
CC   a disease or condition associated with this enzyme (antisense therapy),
CC   especially amyotrophic lateral sclerosis, a disease or condition arising
CC   from aberrant apoptosis and a hyperproliferative disorder. It may also be
CC   used in diagnostics, therapeutics and as a research reagent, e.g.
CC   prophylactically to prevent or delay infection, inflammation or tumour
CC   formation. Sequences given in records ACC40880-ACC40957 represent human
CC   superoxide dismutase 1 antisense inhibitor oligonucleotides
XX
SQ   Sequence 20 BP; 4 A; 6 C; 7 G; 3 T; 0 U; 0 Other;

  Query Match             2.3%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 60;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        409 CCGCACACTGGTGGTCCATG 428
              ||||||||||||||||||||
Db         20 CCGCACACTGGTGGTCCATG 1


RESULT 103
ACC40927/c
ID   ACC40927 standard; DNA; 20 BP.
XX
AC   ACC40927;
XX
DT   23-MAY-2003  (first entry)
XX
DE   Human superoxide dismutase 1 antisense inhibitor # ISIS 150481.
XX
KW   Human; superoxide dismutase 1; antisense; neuroprotective; cytostatic;
KW   antiinflammatory; amyotrophic lateral sclerosis; apoptosis;
KW   hyperproliferative disorder; therapy; infection; inflammation; tumour;
KW   ss.
XX
OS   Homo sapiens.
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   modified_base   1. .20
FT                   /*tag=  a
FT                   /mod_base= OTHER
FT                   /note= "Phosphorothioate linkages. All cytosines are 5-
FT                   methylcytosine"
FT   modified_base   1. .5
FT                   /*tag=  b
FT                   /mod_base= OTHER
FT                   /note= "2'-methoxyethyl (2'-MOE) nucleotides"
FT   modified_base   16. .20
FT                   /*tag=  c
FT                   /mod_base= OTHER
FT                   /note= "2'-methoxyethyl (2'-MOE) nucleotides"
XX
PN   WO2003000707-A2.
XX
PD   03-JAN-2003.
```

XX
PF 19-JUN-2002; 2002WO-US019664.
XX
PR 21-JUN-2001; 2001US-00888360.
XX
PA (ISIS-) ISIS PHARM INC.
XX
PI Bennett FC, Dobie K;
XX
DR WPI; 2003-184032/18.
XX
PT Novel antisense compounds targeted to nucleic acids encoding human
PT superoxide dismutase 1, for modulating expression of the dismutase and
PT treating diseases or conditions, e.g. amyotrophic lateral sclerosis.
XX
PS Claim 3; Page 77; 107pp; English.
XX
CC The invention relates to a compound of 8-50 nucleobases in length,
CC targeted to a nucleic acid molecule encoding human superoxide dismutase
CC 1. The compound specifically hybridises with and inhibits the expression
CC of human superoxide dismutase 1 by hybridising with at least an 8-
CC nucleobase portion of the nucleic acid molecule encoding the active site
CC of the enzyme. The activity of compounds of the invention may be
CC described as neuroprotective, cytostatic and antiinflammatory. The
CC mechanism of action of compounds of the invention is antisense inhibition
CC of human superoxide dismutase 1 expression by chimeric phosphorothioate
CC oligonucleotides having 2'-methoxyethyl (2'-MOE) wings and a deoxy gap.
CC Compounds of the invention are useful for inhibiting the expression of
CC human superoxide dismutase 1 in human cells or tissues, and for treating
CC a disease or condition associated with this enzyme (antisense therapy),
CC especially amyotrophic lateral sclerosis, a disease or condition arising
CC from aberrant apoptosis and a hyperproliferative disorder. It may also be
CC used in diagnostics, therapeutics and as a research reagent, e.g.
CC prophylactically to prevent or delay infection, inflammation or tumour
CC formation. Sequences given in records ACC40880-ACC40957 represent human
CC superoxide dismutase 1 antisense inhibitor oligonucleotides
XX
SQ Sequence 20 BP; 4 A; 4 C; 4 G; 8 T; 0 U; 0 Other;

Query Match 2.3%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 60;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 761 CAGACTTAAATCACAGATGG 780
||||||||||||||||||||
Db 20 CAGACTTAAATCACAGATGG 1

RESULT 104
ADQ80681/c
ID ADQ80681 standard; DNA; 20 BP.
XX
AC ADQ80681;
XX
DT 21-OCT-2004 (first entry)
XX
DE Human cytosolic superoxide dismutase 1 RT-PCR primer, hSODc-antisense.
XX
KW Survival; neuron; tyrosine hydroxylase; tyrosine 3-monooxygenase; TH;
KW anti-apoptotic; Bcl-XL; neurological disorder; neuroprotective;
KW nootropic; antiparkinsonian; transplantation; drug screening;
KW gene profiling; CNS disorder; neurodegenerative disease; primer; ss;
KW hSOD1; RT-PCR; human.
XX
OS Homo sapiens.
XX
PN WO2004062554-A2.
XX
PD 29-JUL-2004.
XX
PF 07-JAN-2004; 2004WO-DK000008.
XX
PR 08-JAN-2003; 2003US-0438719P.
PR 11-APR-2003; 2003DK-00000581.
PR 22-APR-2003; 2003US-0464546P.
XX
PA (NSGE-) NSGENE AS.
XX
PI Martinez-Serrano A, Liste I, Villa A;
XX
DR WPI; 2004-544027/52.
XX
PT Enhancing the survival of neurons or cells expressing tyrosine
PT hydroxylase (TH) for treating neurodegenerative disorders, comprises
PT contacting neurons or TH expressing cells with Bcl-XL or its functional
PT equivalent.
XX
PS Example 2; Page 42; 108pp; English.
XX
CC The invention relates to a novel method for enhancing the survival of
CC neurons and/or of cells expressing tyrosine hydroxylase (EC 1.14.16.2 -
CC Tyrosine 3-monooxygenase) (TH+). The method comprises contacting a
CC population of cells with Bcl-XL or its functional equivalent, where the
CC population of cells is selected from: neurons or cells capable of
CC differentiating into neurons; or TH expressing cells or cells capable of
CC differentiating into TH expressing cells. The invention further
CC comprises: a composition of cells obtainable by the method above; a
CC composition of isolated mammalian cells overexpressing the anti-apoptotic
CC Bcl-XL protein; a neural progenitor cell; a differentiated dopaminergic
CC neuron; an implantable cell culture device comprising: a semi-permeable
CC membrane permitting the diffusion of a biologically active protein
CC through it; and a composition of cells selected from above; a lentiviral
CC vector particle being produced based on a lentiviral transfer vector;
CC enhancing the survival of TH + cells in vivo; a retroviral particle being
CC produced based on a retroviral transfer vector; enhancing the survival of
CC in vivo differentiated dopaminergic neurons; a packaging cell line
CC capable of producing an infective vector particle; a packaging cell line
CC capable of producing an infective vector particle; treatment of a
CC neurological disorder; a fusion protein comprising the Bcl-XL sequence
CC comprising 233 amino acids ADQ80670 or its functional equivalent and a
CC membrane translocation signal; an expression vector comprising a
CC polynucleotide sequence coding for the fusion protein and a promoter
CC sequence capable of directing the expression of the fusion protein in a
CC host cell; a host cell comprising the expression vector; and producing
CC the fusion protein. The compositions of the invention have
CC neuroprotective, nootropic, and antiparkinsonian activities. The cells
CC are useful for transplantation, drug screening, gene profiling, or for
CC the preparation of a medicament useful for the treatment of a CNS
CC disorder. The CNS disorder is a neurodegenerative disease involving
CC lesioned and traumatic neurons, including traumatic lesions of peripheral
CC nerves, the medulla, the spinal chord, cerebral ischaemic neuronal
CC damage, neuropathy, peripheral neuropathy, Alzheimer's disease,
CC Huntington's disease, Parkinson's disease, amyotrophic lateral sclerosis,
CC or memory impairment connected to dementia. The method is useful for
CC enhancing the survival of neurons and/or of cells expressing tyrosine
CC hydroxylase for the treatment of neurodegenerative disorders. This
CC polynucleotide sequence represents a primer used in the exemplification
CC of the invention.
XX
SQ Sequence 20 BP; 6 A; 7 C; 4 G; 3 T; 0 U; 0 Other;

Query Match 2.3%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 60;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 538 TTGGATGTAGTCTGAGGCCC 557
||||||||||||||||||||
Db 20 TTGGATGTAGTCTGAGGCCC 1

RESULT 105
ADR42714
ID ADR42714 standard; DNA; 20 BP.
XX
AC ADR42714;
XX

DT 04-NOV-2004 (first entry)
XX
DE SOD gene analysis PCR primer #1 from acetylated glycerol activation.
XX
KW ss; primer; antiparkinsonian; nootropic; neuroprotective;
KW alpha peroxisome proliferator-activated receptor agonist;
KW acylated glycerol; neurodegenerative disorder; Parkinson's disease;
KW Alzheimer's disease; plate sclerosis; gene expression;
KW super-oxide dismutase; catalase; glutathione peroxidase; PCR primer;
KW beta-actin; gene analysis; cyclophilin.
XX
OS Homo sapiens.
XX
PN FR2850870-A1.
XX
PD 13-AUG-2004.
XX
PF 12-FEB-2003; 2003FR-00001691.
XX
PR 12-FEB-2003; 2003FR-00001691.
XX
PA (GENF-) GENFIT SA.
XX
PI Darteil R, Caumont BK, Najib J;
XX
DR WPI; 2004-583505/57.
XX
PT Use of acylated glycerols and their nitrogen and sulfur analogs for the
PT prevention and treatment of neurodegenerative disorders, e.g. Parkinson's
PT disease.
XX
PS Example 27; Page 119; 144pp; French.
XX
CC The invention relates to the use of acylated glycerols, and their
CC nitrogen and sulfur analogue (I), their optical and geometric isomers,
CC racemates, salts, hydrates, and mixtures, for the prevention and
CC treatment of neurodegenerative disorders. The compounds (I) are used for
CC the prevention and treatment of neurodegenerative diseases such as
CC Parkinson's, Alzheimer's, and plate sclerosis. In an example of the
CC invention, the compounds are tested for their effects on the gene
CC expression of several genes including super-oxide dismutase (SOD),
CC catalase, glutathione peroxidase and other anti-oxidant genes. This
CC sequence corresponds to a PCR primer to amplify the SOD gene for gene
CC analysis.
XX
SQ Sequence 20 BP; 7 A; 7 C; 3 G; 3 T; 0 U; 0 Other;

Query Match 2.3%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 60;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 263 CCTCTATCCAGAAAACACGG 282
||||||||||||||||||||
Db 1 CCTCTATCCAGAAAACACGG 20

RESULT 106
ADR42715/c
ID ADR42715 standard; DNA; 20 BP.
XX
AC ADR42715;
XX
DT 04-NOV-2004 (first entry)
XX
DE SOD gene analysis PCR primer #2 from acetylated glycerol activation.
XX
KW ss; primer; antiparkinsonian; nootropic; neuroprotective;
KW alpha peroxisome proliferator-activated receptor agonist;
KW acylated glycerol; neurodegenerative disorder; Parkinson's disease;
KW Alzheimer's disease; plate sclerosis; gene expression;
KW super-oxide dismutase; catalase; glutathione peroxidase; PCR primer;
KW beta-actin; gene analysis; cyclophilin.
XX
OS Homo sapiens.
XX
PN FR2850870-A1.
XX
PD 13-AUG-2004.
XX
PF 12-FEB-2003; 2003FR-00001691.
XX
PR 12-FEB-2003; 2003FR-00001691.
XX
PA (GENF-) GENFIT SA.
XX
PI Darteil R, Caumont BK, Najib J;
XX
DR WPI; 2004-583505/57.
XX
PT Use of acylated glycerols and their nitrogen and sulfur analogs for the
PT prevention and treatment of neurodegenerative disorders, e.g. Parkinson's
PT disease.
XX
PS Example 27; Page 119; 144pp; French.
XX
CC The invention relates to the use of acylated glycerols, and their
CC nitrogen and sulfur analogue (I), their optical and geometric isomers,
CC racemates, salts, hydrates, and mixtures, for the prevention and
CC treatment of neurodegenerative disorders. The compounds (I) are used for
CC the prevention and treatment of neurodegenerative diseases such as
CC Parkinson's, Alzheimer's, and plate sclerosis. In an example of the
CC invention, the compounds are tested for their effects on the gene
CC expression of several genes including super-oxide dismutase (SOD),
CC catalase, glutathione peroxidase and other anti-oxidant genes. This
CC sequence corresponds to a PCR primer to amplify the SOD gene for gene
CC analysis.
XX
SQ Sequence 20 BP; 6 A; 7 C; 4 G; 3 T; 0 U; 0 Other;

Query Match 2.3%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 60;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 536 CCTTGGATGTAGTCTGAGGC 555
||||||||||||||||||||
Db 20 CCTTGGATGTAGTCTGAGGC 1

RESULT 107
AAQ67477/c
ID AAQ67477 standard; DNA; 21 BP.
XX
AC AAQ67477;
XX
DT 25-MAR-2003 (revised)
DT 31-MAY-1995 (first entry)
XX
DE PCR primer for human SOD1 exon 1.
XX
KW Human superoxide dismutase; hSOD1; neurodegeneration;
KW Alzheimer's disease; Parkinson's disease; Huntington's disease;
KW Hallervorden-Spatz disease; olivopontocerebellar atrophy;
KW familial amyotrophic lateral sclerosis; FALS; diagnosis; mutant SOD;
KW SSCP analysis; ss.
XX
OS Synthetic.
XX
PN WO9419493-A1.
XX
PD 01-SEP-1994.
XX
PF 28-FEB-1994; 94WO-US002089.
XX
PR 26-FEB-1993; 93US-00023980.
XX
PA (GEHO) GEN HOSPITAL CORP.

```
PA   (MASI ) MASSACHUSETTS INST TECHNOLOGY.
XX
PI   Brown R,  Horvitz HR,  Rosen DR;
XX
DR   WPI; 1994-294353/36.
XX
PT   Diagnosis, treatment and prevention of diseases of cell death - e.g.
PT   amyotrophic lateral sclerosis, which are the result of e.g. decreased SOD
PT   activity.
XX
PS   Claim 8; Fig 5; 94pp; English.
XX
CC   The presence of a mutation in a gene encoding a superoxide dismutase
CC   (SOD1, SOD2 or SOD3) indicates an increased likelihood of developing a
CC   cell death disease, specifically a neurodegenerative disease. The DNA can
CC   be analysed to detect mutant SOD sequences. Analysis is pref. preceded by
CC   a PCR amplification step. AAQ67476- AAQ67485 are examples of PCR primers
CC   which are useful for diagnosis of diseases linked to SOD1 mutations.
CC   (Updated on 25-MAR-2003 to correct PN field.)
XX
SQ   Sequence 21 BP; 4 A; 5 C; 5 G; 7 T; 0 U; 0 Other;

  Query Match             2.3%;  Score 20;  DB 1;  Length 21;
  Best Local Similarity   100.0%;  Pred. No. 63;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        118 CATCAATTTCGAGCAGAAGG 137
              ||||||||||||||||||||
Db         21 CATCAATTTCGAGCAGAAGG 2


RESULT 108
AAV73827/c
ID   AAV73827 standard; DNA; 21 BP.
XX
AC   AAV73827;
XX
DT   24-FEB-1999  (first entry)
XX
DE   Human SOD1 exon 1 PCR primer #2.
XX
KW   SOD1; SOD2; SOD3; Cu/Zn; superoxide dismutase; mitochondrial; treatment;
KW   extracellular; neurogenerative disease; amyotrophic lateral sclerosis;
KW   familial; ALS; PCR primer; ss.
XX
OS   Synthetic.
OS   Homo sapiens.
XX
PN   US5849290-A.
XX
PD   15-DEC-1998.
XX
PF   07-JUN-1995;   95US-00486953.
XX
PR   26-FEB-1993;   93US-00023980.
PR   28-FEB-1994;   94US-00204052.
XX
PA   (MASI ) MASSACHUSETTS INST TECHNOLOGY.
PA   (GEHO ) GEN HOSPITAL CORP.
XX
PI   Rosen DR,  Brown R,  Horvitz HR;
XX
DR   WPI; 1999-069657/06.
XX
PT   Treatment of neurodegenerative disease - by administering super-oxide
PT   dismutase.
XX
PS   Disclosure; Fig 5; 53pp; English.
XX
CC   AAV73826-V73835 are PCR primers used in the amplification of a novel
CC   human SOD1 gene which encodes a Cu/Zn SOD (superoxide dismutase) protein.
CC   This protein can be used in a method for treating a neurodegenerative
CC   disease particularly familial amyotrophic lateral sclerosis (ALS)
XX
SQ   Sequence 21 BP; 4 A; 5 C; 5 G; 7 T; 0 U; 0 Other;

  Query Match             2.3%;  Score 20;  DB 1;  Length 21;
  Best Local Similarity   100.0%;  Pred. No. 63;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        118 CATCAATTTCGAGCAGAAGG 137
              ||||||||||||||||||||
Db         21 CATCAATTTCGAGCAGAAGG 2


RESULT 109
ADO55690/c
ID   ADO55690 standard; DNA; 21 BP.
XX
AC   ADO55690;
XX
DT   15-JUL-2004  (first entry)
XX
DE   Human cytosolic superoxide dismutase (Cu/ZnSOD) DNA, SOD1 PCR primer #2.
XX
KW   Human; cytosolic superoxide dismutase; Cu/ZnSOD; SOD; SOD1; PCR; ss;
KW   neurodegenerative disease; cell death disease; FALS; neoplasm; primer.
XX
OS   Homo sapiens.
XX
PN   US6723893-B1.
XX
PD   20-APR-2004.
XX
PF   28-FEB-1994;   94US-00204052.
XX
PR   26-FEB-1993;   93US-00023980.
XX
PA   (MASI ) MASSACHUSETTS INST TECHNOLOGY.
PA   (GEHO ) GEN HOSPITAL CORP INC.
XX
PI   Brown R,  Horvitz HR,  Rosen DR;
XX
DR   WPI; 2004-326924/30.
XX
PT   New transgenic mouse having somatic and germ cells containing a transgene
PT   encoding and expressing a neurodegenerative disease-causing mutant SOD-1
PT   polypeptide, useful for research or drug development.
XX
PS   Disclosure; SEQ ID NO 5; 54pp; English.
XX
CC   The invention relates to a transgenic mouse having somatic and germ cells
CC   containing a transgene encoding and expressing a neurodegenerative
CC   disease-causing mutant SOD1 polypeptide. The invention also relates to a
CC   method of diagnosing an increased likelihood of developing cell death
CC   disease in a patient, a kit for the diagnosis of cell death disease in a
CC   patient, a method of treating a patient with a disease involving a mutant
CC   SOD encoding gene, antibodies reactive with a FALS polypeptide, a method
CC   of treating a patient with a neoplasm, a bacterial or yeast cell
CC   containing a purified nucleic acid derived from a FALS gene, a purified
CC   DNA encoding a purified FALS polypeptide and a purified FALS polypeptide.
CC   The SOD1 polypeptide is a murine or human SOD1 polypeptide. The
CC   expression of the mutant polypeptide is under the regulation of the wild-
CC   type promoter. The transgenic mouse is useful for research or drug
CC   development. This sequence represents a PCR primer used to amplify SOD1
CC   DNA encoding the human cytosolic superoxide dismutase (Cu/ZnSOD)
CC   polypeptide.
XX
SQ   Sequence 21 BP; 4 A; 5 C; 5 G; 7 T; 0 U; 0 Other;

  Query Match             2.3%;  Score 20;  DB 1;  Length 21;
  Best Local Similarity   100.0%;  Pred. No. 63;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        118 CATCAATTTCGAGCAGAAGG 137
              ||||||||||||||||||||
```

```
Db         21 CATCAATTTCGAGCAGAAGG 2


RESULT 110
ADO43049
ID   ADO43049 standard; RNA; 25 BP.
XX
AC   ADO43049;
XX
DT   12-AUG-2004  (first entry)
XX
DE   Short interfering RNA (sense)  targeted to wild-type SOD allele (P11).
XX
KW   Superoxide dismutase; SOD; enzyme; amyotrophic lateral sclerosis;
KW   short interfering RNA; siRNA; RNA interference; gene silencing;
KW   DNA-RNA hybrid; human; ss.
XX
OS   Homo sapiens.
XX
FH   Key             Location/Qualifiers
FT   modified_base   20. .25
FT                   /*tag= a
FT                   /mod_base= OTHER
FT                   /note= "OTHER= T"
FT                   /note= "In Fig 1A, bases 22-25 are absent"
XX
PN   WO2004042027-A2.
XX
PD   21-MAY-2004.
XX
PF   04-NOV-2003; 2003WO-US035009.
XX
PR   04-NOV-2002; 2002US-0423507P.
PR   18-JUL-2003; 2003US-0488283P.
XX
PA   (UYMA-) UNIV MASSACHUSETTS.
XX
PI   Xu Z,  Zamore PD;
XX
DR   WPI; 2004-390611/36.
XX
PT   Inhibiting expression of a target allele in a cell comprising at least
PT   two different alleles of a gene, for treating CNS disorders, comprises
PT   administering to the cell an siRNA specific for the target allele.
XX
PS   Claim 14; SEQ ID NO 9; 61pp; English.
XX
CC   The present invention provides methods of specifically inhibiting the
CC   expression of a mutant allele, while preserving the expression of a co-
CC   expressed wild-type allele, using RNA interference (RNAi). The methods
CC   are useful for treating a subject having a disorder correlated with the
CC   presence of a dominant gain of function mutant allele, e.g. amyotrophic
CC   lateral sclerosis (ALS), Huntington's disease, Alzheimer's disease, and
CC   Parkinson's disease (claimed). Small interfering RNAs (siRNA) and small
CC   hairpin RNAs (shRNA) are provided that selectively suppress mutant, but
CC   not wild-type, expression of copper zinc superoxidase dismutase (SOD1),
CC   which causes inherited ALS. In an example from the invention, an allele
CC   of SOD1 in which guanosine 256 (relative to the start of translation) was
CC   mutated to cytosine, generating a Gly to Arg (G85R) mutation, was
CC   selected. 2 Sets of 3 siRNAs ADO43041-ADO43046 and ADO43049-ADO43054,
CC   each targeting either wild-type ADO43047 or mutant ADO43048 SOD1 mRNA,
CC   were designed. The mutated nucleotide was positioned near the predicted
CC   site of SOD1 mRNA cleavage, i.e. position 9 (P9), 10 (P10) or 11 (P11)
CC   relative to the 5' end of the antisense strand of the siRNA. The present
CC   sequence is the sense strand of wild-type siRNA P11; the antisense
CC   sequence is also provided ADO43050. Each of the 6 siRNAs cleaved the
CC   corresponding target RNA, although with different efficiencies. P11 was
CC   less efficient at cleaving the mRNA than wild-type P9 and P10 siRNAs.
XX
SQ   Sequence 25 BP; 5 A; 3 C; 7 G; 6 T; 4 U; 0 Other;

  Query Match             2.3%;  Score 20;  DB 1;  Length 25;
  Best Local Similarity   80.0%;  Pred. No. 76;
  Matches   16;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        312 GAGACTTGGGCAATGTGACT 331
              ||||||::||||||:|:||||
Db          1 GAGACUUGGGCAAUGUGACT 20


RESULT 111
ABQ75418
ID   ABQ75418 standard; DNA; 23 BP.
XX
AC   ABQ75418;
XX
DT   06-NOV-2002  (first entry)
XX
DE   CuZn superoxide dismutase (CuZn-SOD) probe SEQ ID NO:15.
XX
KW   AOP-1; cardiant; nootropic; neuroprotective; antirheumatic; nephrotropic;
KW   hepatotropic; heart disease; neurodegenerative disease; rheumatism;
KW   kidney disease; liver disease; CuZn superoxide dismutase; CuZn-SOD;
KW   probe; ss.
XX
OS   Synthetic.
XX
PN   WO200264169-A1.
XX
PD   22-AUG-2002.
XX
PF   18-FEB-2002; 2002WO-JP001358.
XX
PR   16-FEB-2001; 2001JP-00041003.
XX
PA   (SUNR ) SUNTORY LTD.
PA   (SUNR ) SUNTORY BIOMEDICAL RES LTD.
XX
PI   Hattori F,  Sugimura K,  Furuya M;
XX
DR   WPI; 2002-657567/70.
XX
PT   Remedies for treating diseases associated with a decrease in expression
PT   of AOP-1 gene or AOP-1, also drug screening with the protein and encoded
PT   gene, applicable e.g. in heart diseases, neurodegenerative diseases and
PT   rheumatism.
XX
PS   Example 3; Page 32; 96pp; Japanese.
XX
CC   The present invention describes a method for preventing or treating
CC   diseases associated with a decrease in the expression of AOP-1 gene or
CC   AOP-1 comprises: (a) transferring e.g. a nucleic acid encoding AOP-1 gene
CC   ; or (b) administering a substance enhancing the expression of AOP-1
CC   gene, a substance enhancing production of AOP-1 or a substance enhancing
CC   the function of AOP-1. AOP-1 has cardiant, nootropic, neuroprotective,
CC   antirheumatic, nephrotropic and hepatotropic activities. The method can
CC   be used for treating diseases associated with a decrease in the
CC   expression of AOP-1 gene or AOP-1, including heart diseases,
CC   neurodegenerative diseases, rheumatism, kidney diseases and liver
CC   diseases. The present sequence represents a probe for CuZn superoxide
CC   dismutase (CuZn-SOD), which is used in an example from the present
CC   invention
XX
SQ   Sequence 23 BP; 4 A; 4 C; 10 G; 5 T; 0 U; 0 Other;

  Query Match             2.3%;  Score 19.8;  DB 1;  Length 23;
  Best Local Similarity   91.3%;  Pred. No. 72;
  Matches   21;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        310 TGGAGACTTGGGCAATGTGACTG 332
              ||||||| |||||||||| |||
Db          1 TGGAGACCTGGGCAATGTGGCTG 23


RESULT 112
ADE52404/c
```

```
ID   ADE52404 standard; DNA; 21 BP.
XX
AC   ADE52404;
XX
DT   29-JAN-2004  (first entry)
XX
DE   Target DNA sequence #2 for human SOD1 G281C (Gly93Ala) mutant gene.
XX
KW   Suppression of gene expression; eukaryotic cell; RNA polymerase promoter;
KW   target DNA sequence; RNA polymerase termination signal;
KW   hairpin structure; RNA polymerase III; RNA Pol III; mutated protein;
KW   cancer; leukaemia; haemophilia; viral infection; bacterial infection;
KW   neurodegenerative disease; Alzheimer's disease; Parkinson's disease;
KW   Huntington's disease; amyotrophic lateral sclerosis; ALS; cytostatic;
KW   haemostatic; virucide; antibacterial; neuroprotective; nootropic;
KW   anticonvulsant; antiparkinsonian; human; superoxide dismutase 1; SOD1;
KW   G281C mutant; Gly93Ala mutant; ss.
XX
OS   Synthetic.
OS   Homo sapiens.
XX
PN   US2003180756-A1.
XX
PD   25-SEP-2003.
XX
PF   21-NOV-2002; 2002US-00301516.
XX
PR   21-MAR-2002; 2002US-0366478P.
XX
PA   (SHIY/) SHI Y.
PA   (SUIG/) SUI G.
XX
PI   Shi Y,  Sui G;
XX
DR   WPI; 2003-852231/79.
XX
PT   New nucleic acids, useful for inhibiting the synthesis of a target
PT   protein in a eukaryotic cell, or for treating various diseases by
PT   inhibiting the expression of abnormal or mutated proteins, e.g. leukemia,
PT   viral or bacterial infection.
XX
PS   Disclosure; Page 16; 38pp; English.
XX
CC   The present invention relates to a method for suppressing gene expression
CC   in cells, particularly eukaryotic cells. The method involves a new
CC   nucleic acid comprising in a 5'-3' order: an RNA polymerase promoter
CC   sequence, a first target sequence that is essentially complementary to a
CC   sequence of a target nucleic acid or its complement, a spacer sequence, a
CC   second target sequence that is essentially complementary to the first
CC   target sequence, and an RNA polymerase termination signal, where an RNA
CC   transcribed from the nucleic acid can inhibit expression of the target
CC   gene. The RNA transcribed from the nucleic acid may form a hairpin
CC   structure. The polymerase is preferably RNA polymerase III (Pol III) and
CC   the polymerase termination signal comprises a number of thymidines
CC   sufficient for arresting Pol III activity. The nucleic acids and methods
CC   are useful for suppressing gene expression in cells, or inhibiting the
CC   synthesis of a target protein in a eukaryotic cell or in a cell of a
CC   subject. The nucleic acids can be used for treating various diseases by
CC   inhibiting the expression of abnormal or mutated proteins, e.g. cancers
CC   such as leukaemia, haemophilia, viral or bacterial infections, and
CC   neurodegenerative diseases including Alzheimer's disease, Parkinson's
CC   disease, Huntington's disease and amyotrophic lateral sclerosis (ALS).
CC   The present sequence represents a target DNA sequence that can be used to
CC   inhibit expression of the human superoxide dismutase 1 (SOD1) G281C
CC   (Gly93Ala) mutant gene.
XX
SQ   Sequence 21 BP; 4 A; 7 C; 4 G; 6 T; 0 U; 0 Other;

  Query Match             2.2%;  Score 19.4;  DB 1;  Length 21;
  Best Local Similarity   95.2%;  Pred. No. 71;
  Matches   20;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy       335 GACAAAGATGGTGTGGCCGAT 355
                ||||||||| |||||||||
Db        21 GACAAAGATGCTGTGGCCGAT 1


RESULT 113
ADE52403
ID   ADE52403 standard; DNA; 21 BP.
XX
AC   ADE52403;
XX
DT   29-JAN-2004  (first entry)
XX
DE   Target DNA sequence #1 for human SOD1 G281C (Gly93Ala) mutant gene.
XX
KW   Suppression of gene expression; eukaryotic cell; RNA polymerase promoter;
KW   target DNA sequence; RNA polymerase termination signal;
KW   hairpin structure; RNA polymerase III; RNA Pol III; mutated protein;
KW   cancer; leukaemia; haemophilia; viral infection; bacterial infection;
KW   neurodegenerative disease; Alzheimer's disease; Parkinson's disease;
KW   Huntington's disease; amyotrophic lateral sclerosis; ALS; cytostatic;
KW   haemostatic; virucide; antibacterial; neuroprotective; nootropic;
KW   anticonvulsant; antiparkinsonian; human; superoxide dismutase 1; SOD1;
KW   G281C mutant; Gly93Ala mutant; ss.
XX
OS   Synthetic.
OS   Homo sapiens.
XX
PN   US2003180756-A1.
XX
PD   25-SEP-2003.
XX
PF   21-NOV-2002; 2002US-00301516.
XX
PR   21-MAR-2002; 2002US-0366478P.
XX
PA   (SHIY/) SHI Y.
PA   (SUIG/) SUI G.
XX
PI   Shi Y,  Sui G;
XX
DR   WPI; 2003-852231/79.
XX
PT   New nucleic acids, useful for inhibiting the synthesis of a target
PT   protein in a eukaryotic cell, or for treating various diseases by
PT   inhibiting the expression of abnormal or mutated proteins, e.g. leukemia,
PT   viral or bacterial infection.
XX
PS   Disclosure; Page 16; 38pp; English.
XX
CC   The present invention relates to a method for suppressing gene expression
CC   in cells, particularly eukaryotic cells. The method involves a new
CC   nucleic acid comprising in a 5'-3' order: an RNA polymerase promoter
CC   sequence, a first target sequence that is essentially complementary to a
CC   sequence of a target nucleic acid or its complement, a spacer sequence, a
CC   second target sequence that is essentially complementary to the first
CC   target sequence, and an RNA polymerase termination signal, where an RNA
CC   transcribed from the nucleic acid can inhibit expression of the target
CC   gene. The RNA transcribed from the nucleic acid may form a hairpin
CC   structure. The polymerase is preferably RNA polymerase III (Pol III) and
CC   the polymerase termination signal comprises a number of thymidines
CC   sufficient for arresting Pol III activity. The nucleic acids and methods
CC   are useful for suppressing gene expression in cells, or inhibiting the
CC   synthesis of a target protein in a eukaryotic cell or in a cell of a
CC   subject. The nucleic acids can be used for treating various diseases by
CC   inhibiting the expression of abnormal or mutated proteins, e.g. cancers
CC   such as leukaemia, haemophilia, viral or bacterial infections, and
CC   neurodegenerative diseases including Alzheimer's disease, Parkinson's
CC   disease, Huntington's disease and amyotrophic lateral sclerosis (ALS).
CC   The present sequence represents a target DNA sequence that can be used to
CC   inhibit expression of the human superoxide dismutase 1 (SOD1) G281C
CC   (Gly93Ala) mutant gene.
XX
SQ   Sequence 21 BP; 6 A; 4 C; 7 G; 4 T; 0 U; 0 Other;
```

```
  Query Match             2.2%;  Score 19.4;  DB 1;  Length 21;
  Best Local Similarity   95.2%;  Pred. No. 71;
  Matches   20;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        335 GACAAAGATGGTGTGGCCGAT 355
              ||||||||||  ||||||||||
Db          1 GACAAAGATGCTGTGGCCGAT 21


RESULT 114
AAN81808/c
ID   AAN81808 standard; DNA; 22 BP.
XX
AC   AAN81808;
XX
DT   25-MAR-2003  (revised)
DT   20-SEP-1990  (first entry)
XX
DE   Probe used to identify mutant RF M13 clone containing human copper-zinc
DE   superoxidedismutase (hSOD) Cys111 gene.
XX
KW   Human copper-zinc superoxidedismutase Cys111 gene; RF M13 clone;
KW   M13rp8SODC111S DNA probe; thermostable mutein; enzyme; hybridisation.
XX
OS   Synthetic.
XX
PN   EP275202-A.
XX
PD   20-JUL-1988.
XX
PF   14-JAN-1988;   88EP-00300294.
XX
PR   15-JAN-1987;   87US-00003578.
XX
PA   (CHIR ) CHIRON CORP.
XX
PI   Hallewell RA,  Tekampolso P;
XX
DR   WPI; 1988-199638/29.
XX
PT   Mutein of human copper-zinc superoxidedismutase - having cysteine
PT   residues replaced with an uncharged amino acid, for increased
PT   thermostability.
XX
PS   Example; Page 5; 15pp; English.
XX
CC   RF M13 clone containing hSOD Cys111 gene is designated M13rp8SODC111S.
CC   The probe is (32)P-labelled. The patent is for a mutein of hSOD in which
CC   at least one of the cysteine residues at positions 6 and 111 is replaced
CC   with an uncharged AA. DNA encoding the mutein is also claimed. Substn. of
CC   the free cysteines of hSOD with uncharged AAs increases thermostability.
CC   Cloning and sequencing of hSOD cDNA and the prodn. of hSOD in bacteria
CC   and yeast are described in EP-138111. (Updated on 25-MAR-2003 to correct
CC   PF field.) (Updated on 25-MAR-2003 to correct PA field.) (Updated on 25-
CC   MAR-2003 to correct PI field.)
XX
SQ   Sequence 22 BP; 8 A; 3 C; 5 G; 6 T; 0 U; 0 Other;

  Query Match             2.2%;  Score 19.4;  DB 1;  Length 22;
  Best Local Similarity   95.2%;  Pred. No. 75;
  Matches   20;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        368 GATTCTGTGATCTCACTCTCA 388
              ||||||||||| |||||||||
Db         22 GATTCTGTGATATCACTCTCA 2


RESULT 115
ADE52415
ID   ADE52415 standard; RNA; 23 BP.
XX
AC   ADE52415;
XX
DT   29-JAN-2004  (first entry)
XX
DE   siRNA p9 sequence #1 for wild-type human SOD1 gene.
XX
KW   Suppression of gene expression; eukaryotic cell; RNA polymerase promoter;
KW   target DNA sequence; RNA polymerase termination signal;
KW   hairpin structure; RNA polymerase III; RNA Pol III; mutated protein;
KW   cancer; leukaemia; haemophilia; viral infection; bacterial infection;
KW   neurodegenerative disease; Alzheimer's disease; Parkinson's disease;
KW   Huntington's disease; amyotrophic lateral sclerosis; ALS; cytostatic;
KW   haemostatic; virucide; antibacterial; neuroprotective; nootropic;
KW   anticonvulsant; antiparkinsonian; human; superoxide dismutase 1; SOD1;
KW   small interfering RNA; siRNA; ss.
XX
OS   Homo sapiens.
XX
PN   US2003180756-A1.
XX
PD   25-SEP-2003.
XX
PF   21-NOV-2002; 2002US-00301516.
XX
PR   21-MAR-2002; 2002US-0366478P.
XX
PA   (SHIY/) SHI Y.
PA   (SUIG/) SUI G.
XX
PI   Shi Y,  Sui G;
XX
DR   WPI; 2003-852231/79.
XX
PT   New nucleic acids, useful for inhibiting the synthesis of a target
PT   protein in a eukaryotic cell, or for treating various diseases by
PT   inhibiting the expression of abnormal or mutated proteins, e.g. leukemia,
PT   viral or bacterial infection.
XX
PS   Example 6; Fig 5A; 38pp; English.
XX
CC   The present invention relates to a method for suppressing gene expression
CC   in cells, particularly eukaryotic cells. The method involves a new
CC   nucleic acid comprising in a 5'-3' order: an RNA polymerase promoter
CC   sequence, a first target sequence that is essentially complementary to a
CC   sequence of a target nucleic acid or its complement, a spacer sequence, a
CC   second target sequence that is essentially complementary to the first
CC   target sequence, and an RNA polymerase termination signal, where an RNA
CC   transcribed from the nucleic acid can inhibit expression of the target
CC   gene. The RNA transcribed from the nucleic acid may form a hairpin
CC   structure. The polymerase is preferably RNA polymerase III (Pol III) and
CC   the polymerase termination signal comprises a number of thymidines
CC   sufficient for arresting Pol III activity. The nucleic acids and methods
CC   are useful for suppressing gene expression in cells, or inhibiting the
CC   synthesis of a target protein in a eukaryotic cell or in a cell of a
CC   subject. The nucleic acids can be used for treating various diseases by
CC   inhibiting the expression of abnormal or mutated proteins, e.g. cancers
CC   such as leukaemia, haemophilia, viral or bacterial infections, and
CC   neurodegenerative diseases including Alzheimer's disease, Parkinson's
CC   disease, Huntington's disease and amyotrophic lateral sclerosis (ALS).
CC   The present sequence represents a small interfering RNA (siRNA) that can
CC   be used to target the wild-type human superoxide dismutase 1 (SOD1) gene.
XX
SQ   Sequence 23 BP; 5 A; 3 C; 7 G; 2 T; 4 U; 2 Other;

  Query Match             2.2%;  Score 19.2;  DB 1;  Length 23;
  Best Local Similarity   75.0%;  Pred. No. 81;
  Matches   15;  Conservative    5;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        312 GAGACTTGGGCAATGTGACT 331
              |||||::|||||:|:|||:
Db          1 GAGACUUGGGCAAUGUGACD 20


RESULT 116
```

```
ADE52417
ID   ADE52417 standard; RNA; 23 BP.
XX
AC   ADE52417;
XX
DT   29-JAN-2004  (first entry)
XX
DE   siRNA p11 sequence #1 for wild-type human SOD1 gene.
XX
KW   Suppression of gene expression; eukaryotic cell; RNA polymerase promoter;
KW   target DNA sequence; RNA polymerase termination signal;
KW   hairpin structure; RNA polymerase III; RNA Pol III; mutated protein;
KW   cancer; leukaemia; haemophilia; viral infection; bacterial infection;
KW   neurodegenerative disease; Alzheimer's disease; Parkinson's disease;
KW   Huntington's disease; amyotrophic lateral sclerosis; ALS; cytostatic;
KW   haemostatic; virucide; antibacterial; neuroprotective; nootropic;
KW   anticonvulsant; antiparkinsonian; human; superoxide dismutase 1; SOD1;
KW   small interfering RNA; siRNA; ss.
XX
OS   Homo sapiens.
XX
PN   US2003180756-A1.
XX
PD   25-SEP-2003.
XX
PF   21-NOV-2002; 2002US-00301516.
XX
PR   21-MAR-2002; 2002US-0366478P.
XX
PA   (SHIY/) SHI Y.
PA   (SUIG/) SUI G.
XX
PI   Shi Y,  Sui G;
XX
DR   WPI; 2003-852231/79.
XX
PT   New nucleic acids, useful for inhibiting the synthesis of a target
PT   protein in a eukaryotic cell, or for treating various diseases by
PT   inhibiting the expression of abnormal or mutated proteins, e.g. leukemia,
PT   viral or bacterial infection.
XX
PS   Example 6; Fig 5A; 38pp; English.
XX
CC   The present invention relates to a method for suppressing gene expression
CC   in cells, particularly eukaryotic cells. The method involves a new
CC   nucleic acid comprising in a 5'-3' order: an RNA polymerase promoter
CC   sequence, a first target sequence that is essentially complementary to a
CC   sequence of a target nucleic acid or its complement, a spacer sequence, a
CC   second target sequence that is essentially complementary to the first
CC   target sequence, and an RNA polymerase termination signal, where an RNA
CC   transcribed from the nucleic acid can inhibit expression of the target
CC   gene. The RNA transcribed from the nucleic acid may form a hairpin
CC   structure. The polymerase is preferably RNA polymerase III (Pol III) and
CC   the polymerase termination signal comprises a number of thymidines
CC   sufficient for arresting Pol III activity. The nucleic acids and methods
CC   are useful for suppressing gene expression in cells, or inhibiting the
CC   synthesis of a target protein in a eukaryotic cell or in a cell of a
CC   subject. The nucleic acids can be used for treating various diseases by
CC   inhibiting the expression of abnormal or mutated proteins, e.g. cancers
CC   such as leukaemia, haemophilia, viral or bacterial infections, and
CC   neurodegenerative diseases including Alzheimer's disease, Parkinson's
CC   disease, Huntington's disease and amyotrophic lateral sclerosis (ALS).
CC   The present sequence represents a small interfering RNA (siRNA) that can
CC   be used to target the wild-type human superoxide dismutase 1 (SOD1) gene.
XX
SQ   Sequence 23 BP; 4 A; 2 C; 8 G; 2 T; 5 U; 2 Other;

  Query Match             2.2%;  Score 19.2;  DB 1;  Length 23;
  Best Local Similarity   70.0%;  Pred. No. 81;
  Matches   14;  Conservative    6;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        310 TGGAGACTTGGGCAATGTGA 329
              :||||||::||||||:|:|:
Db          1 UGGAGACUUGGGCAAUGUGD 20


RESULT 117
AAN60181/c
ID   AAN60181 standard; DNA; 19 BP.
XX
AC   AAN60181;
XX
DT   25-MAR-2003  (revised)
DT   15-AUG-1991  (first entry)
XX
DE   Sequence of probe complementary to the base sequence corresponding to the
DE   C-terminus of human Cu-Zn superoxide dismutase (SOD).
XX
KW   Anti-inflammatory; regulatory gene; enzyme; ss.
XX
OS   Homo sapiens.
XX
PN   EP180964-A.
XX
PD   14-MAY-1986.
XX
PF   05-NOV-1985;   85EP-00114073.
XX
PR   06-NOV-1984;   84JP-00232395.
XX
PA   (UBEI ) UBE IND LTD.
XX
PI   Kumahara H,  Maruyama M,  Anpeiji S,  Owa T;
XX
DR   WPI; 1986-126415/20.
XX
PT   Recombinant DNA for transforming microorganism - comprising regulatory
PT   gene and human copper-zinc superoxidedismutase structural gene.
XX
PS   Example; Page 16; 40pp; English.
XX
CC   The claimed Cu-Zn SOD structural gene may be a cDNA derived from mRNA
CC   sepd. from normal human tissues or a synthetic gene for the same AA SQ in
CC   which the codons for some AAs are replaced by codons which are frequently
CC   used in a host organism. The regulatory gene of the colicin E1 gene in
CC   the present invention contains the base sequence from No. 143 to No.359
CC   in AAN60182 as an essential segment. (Updated on 25-MAR-2003 to correct
CC   PA field.) (Updated on 25-MAR-2003 to correct PI field.)
XX
SQ   Sequence 19 BP; 4 A; 4 C; 4 G; 7 T; 0 U; 0 Other;

  Query Match             2.2%;  Score 19;  DB 1;  Length 19;
  Best Local Similarity   100.0%;  Pred. No. 69;
  Matches   19;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        511 AATTGGGATCGCCCAATAA 529
              |||||||||||||||||||
Db         19 AATTGGGATCGCCCAATAA 1


RESULT 118
ABQ73056/c
ID   ABQ73056 standard; DNA; 19 BP.
XX
AC   ABQ73056;
XX
DT   24-SEP-2002  (first entry)
XX
DE   Cu/Zn SOD gene related PCR primer SEQ ID NO:4.
XX
KW   Amyotrophic lateral sclerosis; ALS; transgenic rat; SOD; Cu/Zn SOD;
KW   superoxide dismutase; PCR primer; ss.
XX
OS   Rattus sp.
OS   Synthetic.
XX
```

PN JP2002142610-A.
XX
PD 21-MAY-2002.
XX
PF 07-NOV-2000; 2000JP-00339567.
XX
PR 07-NOV-2000; 2000JP-00339567.
XX
PA (TOHO-) TOHOKU TECHNOARCH KK.
XX
DR WPI; 2002-552464/59.
XX
PT An amyotrophic lateral sclerosis model rat for investigation of its
PT pathology and onset mechanism with introduced exogenic variant Cu/Zn
PT superoxide dismutase.
XX
PS Example 1; Page 13; 28pp; Japanese.
XX
CC The present invention describes an amyotrophic lateral sclerosis (ALS)
CC model rat. Also described: (1) a transgenic rat or its progeny having a
CC DNA with integrated exogenic variant Cu/Zn superoxide dismutase (SOD)
CC gene; and (2) rat embryonic stem cells having human variant Cu/Zn SOD
CC gene sequence. The transgenic rat can be used in the investigation of the
CC pathology and the onset mechanism of ALS. The present sequence represents
CC a PCR primer which is used in an example from the present invention
XX
SQ Sequence 19 BP; 5 A; 4 C; 7 G; 3 T; 0 U; 0 Other;

Query Match 2.2%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 69;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 547 GTCTGAGGCCCCTTAACTC 565
||||||||||||||||||||
Db 19 GTCTGAGGCCCCTTAACTC 1

RESULT 119
ADQ80680
ID ADQ80680 standard; DNA; 19 BP.
XX
AC ADQ80680;
XX
DT 21-OCT-2004 (first entry)
XX
DE Human cytosolic superoxide dismutase (SOD)1 RT-PCR primer, hSODc-sense.
XX
KW Survival; neuron; tyrosine hydroxylase; tyrosine 3-monooxygenase; TH;
KW anti-apoptotic; Bcl-XL; neurological disorder; neuroprotective;
KW nootropic; antiparkinsonian; transplantation; drug screening;
KW gene profiling; CNS disorder; neurodegenerative disease; primer; ss;.
KW hSOD1; RT-PCR; human.
XX
OS Homo sapiens.
XX
PN WO2004062554-A2.
XX
PD 29-JUL-2004.
XX
PF 07-JAN-2004; 2004WO-DK000008.
XX
PR 08-JAN-2003; 2003US-0438719P.
PR 11-APR-2003; 2003DK-00000581.
PR 22-APR-2003; 2003US-0464546P.
XX
PA (NSGE-) NSGENE AS.
XX
PI Martinez-Serrano A, Liste I, Villa A;
XX
DR WPI; 2004-544027/52.
XX
PT Enhancing the survival of neurons or cells expressing tyrosine
PT hydroxylase (TH) for treating neurodegenerative disorders, comprises
PT contacting neurons or TH expressing cells with Bcl-XL or its functional
PT equivalent.
XX
PS Example 2; Page 42; 108pp; English.
XX
CC The invention relates to a novel method for enhancing the survival of
CC neurons and/or of cells expressing tyrosine hydroxylase (EC 1.14.16.2 -
CC Tyrosine 3-monooxygenase) (TH +). The method comprises contacting a
CC population of cells with Bcl-XL or its functional equivalent, where the
CC population of cells is selected from: neurons or cells capable of
CC differentiating into neurons; or TH expressing cells or cells capable of
CC differentiating into TH expressing cells. The invention further
CC comprises: a composition of cells obtainable by the method above; a
CC composition of isolated mammalian cells overexpressing the anti-apoptotic
CC Bcl-XL protein; a neural progenitor cell; a differentiated dopaminergic
CC neuron; an implantable cell culture device comprising: a semi-permeable
CC membrane permitting the diffusion of a biologically active protein
CC through it; and a composition of cells selected from above; a lentiviral
CC vector particle being produced based on a lentiviral transfer vector;
CC enhancing the survival of TH + cells in vivo; a retroviral particle being
CC produced based on a retroviral transfer vector; enhancing the survival of
CC in vivo differentiated dopaminergic neurons; a packaging cell line
CC capable of producing an infective vector particle; a packaging cell line
CC capable of producing an infective vector particle; treatment of a
CC neurological disorder; a fusion protein comprising the Bcl-XL sequence
CC comprising 233 amino acids ADQ80670 or its functional equivalent and a
CC membrane translocation signal; an expression vector comprising a
CC polynucleotide sequence coding for the fusion protein and a promoter
CC sequence capable of directing the expression of the fusion protein in a
CC host cell; a host cell comprising the expression vector; and producing
CC the fusion protein. The compositions of the invention have
CC neuroprotective, nootropic, and antiparkinsonian activities. The cells
CC are useful for transplantation, drug screening, gene profiling, or for
CC the preparation of a medicament useful for the treatment of a CNS
CC disorder. The CNS disorder is a neurodegenerative disease involving
CC lesioned and traumatic neurons, including traumatic lesions of peripheral
CC nerves, the medulla, the spinal chord, cerebral ischaemic neuronal
CC damage, neuropathy, peripheral neuropathy, Alzheimer's disease,
CC Huntington's disease, Parkinson's disease, amyotrophic lateral sclerosis,
CC or memory impairment connected to dementia. The method is useful for
CC enhancing the survival of neurons and/or of cells expressing tyrosine
CC hydroxylase for the treatment of neurodegenerative disorders. This
CC polynucleotide sequence represents a primer used in the exemplification
CC of the invention.
XX
SQ Sequence 19 BP; 3 A; 4 C; 7 G; 5 T; 0 U; 0 Other;

Query Match 2.2%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 69;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 48 GCGTGGCCTAGCGAGTTAT 66
||||||||||||||||||||
Db 1 GCGTGGCCTAGCGAGTTAT 19

RESULT 120
ADE52425/c
ID ADE52425 standard; RNA; 23 BP.
XX
AC ADE52425;
XX
DT 29-JAN-2004 (first entry)
XX
DE siRNA p11 sequence #2 for wild-type human SOD1 gene.
XX
KW Suppression of gene expression; eukaryotic cell; RNA polymerase promoter;
KW target DNA sequence; RNA polymerase termination signal;
KW hairpin structure; RNA polymerase III; RNA Pol III; mutated protein;
KW cancer; leukaemia; haemophilia; viral infection; bacterial infection;
KW neurodegenerative disease; Alzheimer's disease; Parkinson's disease;
KW Huntington's disease; amyotrophic lateral sclerosis; ALS; cytostatic;
KW haemostatic; virucide; antibacterial; neuroprotective; nootropic;

KW anticonvulsant; antiparkinsonian; human; superoxide dismutase 1; SOD1;
KW small interfering RNA; siRNA; ss.
XX
OS Homo sapiens.
XX
PN US2003180756-A1.
XX
PD 25-SEP-2003.
XX
PF 21-NOV-2002; 2002US-00301516.
XX
PR 21-MAR-2002; 2002US-0366478P.
XX
PA (SHIY/) SHI Y.
PA (SUIG/) SUI G.
XX
PI Shi Y, Sui G;
XX
DR WPI; 2003-852231/79.
XX
PT New nucleic acids, useful for inhibiting the synthesis of a target
PT protein in a eukaryotic cell, or for treating various diseases by
PT inhibiting the expression of abnormal or mutated proteins, e.g. leukemia,
PT viral or bacterial infection.
XX
PS Example 6; Fig 5A; 38pp; English.
XX
CC The present invention relates to a method for suppressing gene expression
CC in cells, particularly eukaryotic cells. The method involves a new
CC nucleic acid comprising in a 5'-3' order: an RNA polymerase promoter
CC sequence, a first target sequence that is essentially complementary to a
CC sequence of a target nucleic acid or its complement, a spacer sequence, a
CC second target sequence that is essentially complementary to the first
CC target sequence, and an RNA polymerase termination signal, where an RNA
CC transcribed from the nucleic acid can inhibit expression of the target
CC gene. The RNA transcribed from the nucleic acid may form a hairpin
CC structure. The polymerase is preferably RNA polymerase III (Pol III) and
CC the polymerase termination signal comprises a number of thymidines
CC sufficient for arresting Pol III activity. The nucleic acids and methods
CC are useful for suppressing gene expression in cells, or inhibiting the
CC synthesis of a target protein in a eukaryotic cell or in a cell of a
CC subject. The nucleic acids can be used for treating various diseases by
CC inhibiting the expression of abnormal or mutated proteins, e.g. cancers
CC such as leukaemia, haemophilia, viral or bacterial infections, and
CC neurodegenerative diseases including Alzheimer's disease, Parkinson's
CC disease, Huntington's disease and amyotrophic lateral sclerosis (ALS).
CC The present sequence represents a small interfering RNA (siRNA) that can
CC be used to target the wild-type human superoxide dismutase 1 (SOD1) gene.
XX
SQ Sequence 23 BP; 5 A; 8 C; 2 G; 2 T; 4 U; 2 Other;

Query Match 2.2%; Score 19; DB 1; Length 23;
Best Local Similarity 100.0%; Pred. No. 84;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 310 TGGAGACTTGGGCAATGTG 328
||||||||||||||||||||
Db 19 TGGAGACTTGGGCAATGTG 1

RESULT 121
ADE52424/c
ID ADE52424 standard; RNA; 23 BP.
XX
AC ADE52424;
XX
DT 29-JAN-2004 (first entry)
XX
DE siRNA p10 sequence #2 for wild-type human SOD1 gene.
XX
KW Suppression of gene expression; eukaryotic cell; RNA polymerase promoter;
KW target DNA sequence; RNA polymerase termination signal;
KW hairpin structure; RNA polymerase III; RNA Pol III; mutated protein;
KW cancer; leukaemia; haemophilia; viral infection; bacterial infection;
KW neurodegenerative disease; Alzheimer's disease; Parkinson's disease;
KW Huntington's disease; amyotrophic lateral sclerosis; ALS; cytostatic;
KW haemostatic; virucide; antibacterial; neuroprotective; nootropic;
KW anticonvulsant; antiparkinsonian; human; superoxide dismutase 1; SOD1;
KW small interfering RNA; siRNA; ss.
XX
OS Homo sapiens.
XX
PN US2003180756-A1.
XX
PD 25-SEP-2003.
XX
PF 21-NOV-2002; 2002US-00301516.
XX
PR 21-MAR-2002; 2002US-0366478P.
XX
PA (SHIY/) SHI Y.
PA (SUIG/) SUI G.
XX
PI Shi Y, Sui G;
XX
DR WPI; 2003-852231/79.
XX
PT New nucleic acids, useful for inhibiting the synthesis of a target
PT protein in a eukaryotic cell, or for treating various diseases by
PT inhibiting the expression of abnormal or mutated proteins, e.g. leukemia,
PT viral or bacterial infection.
XX
PS Example 6; Fig 5A; 38pp; English.
XX
CC The present invention relates to a method for suppressing gene expression
CC in cells, particularly eukaryotic cells. The method involves a new
CC nucleic acid comprising in a 5'-3' order: an RNA polymerase promoter
CC sequence, a first target sequence that is essentially complementary to a
CC sequence of a target nucleic acid or its complement, a spacer sequence, a
CC second target sequence that is essentially complementary to the first
CC target sequence, and an RNA polymerase termination signal, where an RNA
CC transcribed from the nucleic acid can inhibit expression of the target
CC gene. The RNA transcribed from the nucleic acid may form a hairpin
CC structure. The polymerase is preferably RNA polymerase III (Pol III) and
CC the polymerase termination signal comprises a number of thymidines
CC sufficient for arresting Pol III activity. The nucleic acids and methods
CC are useful for suppressing gene expression in cells, or inhibiting the
CC synthesis of a target protein in a eukaryotic cell or in a cell of a
CC subject. The nucleic acids can be used for treating various diseases by
CC inhibiting the expression of abnormal or mutated proteins, e.g. cancers
CC such as leukaemia, haemophilia, viral or bacterial infections, and
CC neurodegenerative diseases including Alzheimer's disease, Parkinson's
CC disease, Huntington's disease and amyotrophic lateral sclerosis (ALS).
CC The present sequence represents a small interfering RNA (siRNA) that can
CC be used to target the wild-type human superoxide dismutase 1 (SOD1) gene.
XX
SQ Sequence 23 BP; 4 A; 8 C; 2 G; 2 T; 5 U; 2 Other;

Query Match 2.2%; Score 19; DB 1; Length 23;
Best Local Similarity 100.0%; Pred. No. 84;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 311 GGAGACTTGGGCAATGTGA 329
|||||||||||||||||||
Db 19 GGAGACTTGGGCAATGTGA 1

RESULT 122
ADE52423/c
ID ADE52423 standard; RNA; 23 BP.
XX
AC ADE52423;
XX
DT 29-JAN-2004 (first entry)
XX
DE siRNA p9 sequence #2 for wild-type human SOD1 gene.

XX
KW Suppression of gene expression; eukaryotic cell; RNA polymerase promoter;
KW target DNA sequence; RNA polymerase termination signal;
KW hairpin structure; RNA polymerase III; RNA Pol III; mutated protein;
KW cancer; leukaemia; haemophilia; viral infection; bacterial infection;
KW neurodegenerative disease; Alzheimer's disease; Parkinson's disease;
KW Huntington's disease; amyotrophic lateral sclerosis; ALS; cytostatic;
KW haemostatic; virucide; antibacterial; neuroprotective; nootropic;
KW anticonvulsant; antiparkinsonian; human; superoxide dismutase 1; SOD1;
KW small interfering RNA; siRNA; ss.
XX
OS Homo sapiens.
XX
PN US2003180756-A1.
XX
PD 25-SEP-2003.
XX
PF 21-NOV-2002; 2002US-00301516.
XX
PR 21-MAR-2002; 2002US-0366478P.
XX
PA (SHIY/) SHI Y.
PA (SUIG/) SUI G.
XX
PI Shi Y, Sui G;
XX
DR WPI; 2003-852231/79.
XX
PT New nucleic acids, useful for inhibiting the synthesis of a target
PT protein in a eukaryotic cell, or for treating various diseases by
PT inhibiting the expression of abnormal or mutated proteins, e.g. leukemia,
PT viral or bacterial infection.
XX
PS Example 6; Fig 5A; 38pp; English.
XX
CC The present invention relates to a method for suppressing gene expression
CC in cells, particularly eukaryotic cells. The method involves a new
CC nucleic acid comprising in a 5'-3' order: an RNA polymerase promoter
CC sequence, a first target sequence that is essentially complementary to a
CC sequence of a target nucleic acid or its complement, a spacer sequence, a
CC second target sequence that is essentially complementary to the first
CC target sequence, and an RNA polymerase termination signal, where an RNA
CC transcribed from the nucleic acid can inhibit expression of the target
CC gene. The RNA transcribed from the nucleic acid may form a hairpin
CC structure. The polymerase is preferably RNA polymerase III (Pol III) and
CC the polymerase termination signal comprises a number of thymidines
CC sufficient for arresting Pol III activity. The nucleic acids and methods
CC are useful for suppressing gene expression in cells, or inhibiting the
CC synthesis of a target protein in a eukaryotic cell or in a cell of a
CC subject. The nucleic acids can be used for treating various diseases by
CC inhibiting the expression of abnormal or mutated proteins, e.g. cancers
CC such as leukaemia, haemophilia, viral or bacterial infections, and
CC neurodegenerative diseases including Alzheimer's disease, Parkinson's
CC disease, Huntington's disease and amyotrophic lateral sclerosis (ALS).
CC The present sequence represents a small interfering RNA (siRNA) that can
CC be used to target the wild-type human superoxide dismutase 1 (SOD1) gene.
XX
SQ Sequence 23 BP; 4 A; 7 C; 3 G; 2 T; 5 U; 2 Other;

Query Match 2.2%; Score 19; DB 1; Length 23;
Best Local Similarity 100.0%; Pred. No. 84;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 312 GAGACTTGGGCAATGTGAC 330
||||||||||||||||||||
Db 19 GAGACTTGGGCAATGTGAC 1

RESULT 123
AAV01384/c
ID AAV01384 standard; DNA; 20 BP.
XX
AC AAV01384;
XX
DT 23-MAR-1998 (first entry)
XX
DE Superoxide dismutase 1 PCR primer for universal mammalian STS's.
XX
KW PCR primer; polymerase chain reaction; amplification; UM-STS;
KW universal mammalian sequence tagged site; genomic map; clone; ss.
XX
OS Synthetic.
XX
PN WO9731012-A1.
XX
PD 28-AUG-1997.
XX
PF 18-FEB-1997; 97WO-US002403.
XX
PR 22-FEB-1996; 96US-0012061P.
XX
PA (UNMI) UNIV MICHIGAN.
PA (UNMS) UNIV MICHIGAN STATE.
XX
PI Brewer GJ, Venta PJ, Yuzbasiyan-Gurkan V;
XX
DR WPI; 1997-435083/40.
XX
PT New oligonucleotide primers amplifying gene regions conserved among
PT mammals - useful for developing genomic maps, isolating clones and making
PT cross-species comparisons.
XX
PS Claim 2; Page 13; 26pp; English.
XX
CC The present sequence represents a specifically claimed oligonucleotide
CC PCR primer. The oligonucleotide can be used for polymerase chain reaction
CC (PCR) amplification of DNA, specifically regions of specific genes that
CC are conserved among mammalian species, i.e. pairs of oligonucleotides
CC from the present specification represent universal mammalian sequence-
CC tagged site (UM-STS) primers. The primers are used to develop genomic
CC maps, to isolate clones from libraries, to make cross-species comparisons
CC and to develop additional genetic markers. UM-STS allow genomic
CC comparisons to be made between more species
XX
SQ Sequence 20 BP; 4 A; 9 C; 3 G; 4 T; 0 U; 0 Other;

Query Match 2.1%; Score 18.4; DB 1; Length 20;
Best Local Similarity 95.0%; Pred. No. 82;
Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 302 AGGCATGTTGGAGACTTGGG 321
|||||||||||||||| ||||
Db 20 AGGCATGTTGGAGACCTGGG 1

RESULT 124
ADT66494/c
ID ADT66494 standard; DNA; 18 BP.
XX
AC ADT66494;
XX
DT 16-DEC-2004 (first entry)
XX
DE PCR primer for CuZn SOD SEQ ID NO:8.
XX
KW ss; primer; PCR; CuZn SOD; cancer; antioxidant gene expression analysis;
KW irradiation therapy.
XX
OS Synthetic.
XX
PN KR2004025183-A.
XX
PD 24-MAR-2004.
XX
PF 18-SEP-2002; 2002KR-00057027.
XX

PR 18-SEP-2002; 2002KR-00057027.
XX
PA (PARK/) PARK Y M.
XX
PI Choi EM, Han MY, Hwang SY, Jun HJ, Kim YH, Park JH, Park YM;
XX
DR WPI; 2004-495260/47.
XX
PT Method and DNA chip for monitoring response of cancer patients to
PT irradiation therapy using antioxidant gene expression analysis.
XX
PS Claim 2; SEQ ID NO 8; 22pp; Korean.
XX
CC The invention relates to a novel method and a DNA chip for monitoring a
CC response of cancer patients to irradiation therapy using antioxidant gene
CC expression analysis, thereby accurately anticipating the response to
CC irradiation therapy and minimizing adverse side-effects thereof. A method
CC for monitoring a response of cancer patients to irradiation therapy
CC comprises: collecting a peripheral blood cell from a human; irradiating
CC the peripheral blood cell; extracting RNA according to the time period;
CC preparing DNA from the RNA; hybridizing the DNA with antioxidant enzyme
CC cDNA; amplifying the hybridized DNA using one or more pairs of primers
CC selected from: DNA fragments of ADT66487 and ADT66488; DNA fragments of
CC ADT66489 and ADT66490; DNA fragments of ADT66491 and ADT66492; DNA
CC fragments of ADT66493 and ADT66494; DNA fragments of ADT66495 and
CC ADT66496; and DNA fragments of ADT66497 and ADT66498; and analyzing
CC expression pattern of the amplified DNA according to the time period. A
CC DNA chip for monitoring a response of cancer patients to irradiation
CC therapy amplifies one or more antioxidant genes corresponding to the
CC following DNA fragments: DNA fragments of ADT66487 and ADT66488 - GPx1;
CC DNA fragments of ADT66489 and ADT66490 - gamma-GCS; DNA fragments of
CC ADT66491 and ADT66492 - catalase; DNA fragments of ADT66493 and ADT66494
CC - CuZn SOD; DNA fragments of ADT66495 and ADT66496 - Mn SOD; and DNA
CC fragments of ADT66497 and ADT66498 - Prx II. The present sequence
CC represents a PCR primer of the invention.
XX
SQ Sequence 18 BP; 4 A; 5 C; 4 G; 5 T; 0 U; 0 Other;

Query Match 2.1%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 79;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 509 GTAATTGGGATCGCCCAA 526
||||||||||||||||||
Db 18 GTAATTGGGATCGCCCAA 1

RESULT 125
ADE52401
ID ADE52401 standard; DNA; 19 BP.
XX
AC ADE52401;
XX
DT 29-JAN-2004 (first entry)
XX
DE Target DNA sequence #1 for human SOD1 G256C (Gly85Arg) mutant gene.
XX
KW Suppression of gene expression; eukaryotic cell; RNA polymerase promoter;
KW target DNA sequence; RNA polymerase termination signal;
KW hairpin structure; RNA polymerase III; RNA Pol III; mutated protein;
KW cancer; leukaemia; haemophilia; viral infection; bacterial infection;
KW neurodegenerative disease; Alzheimer's disease; Parkinson's disease;
KW Huntington's disease; amyotrophic lateral sclerosis; ALS; cytostatic;
KW haemostatic; virucide; antibacterial; neuroprotective; nootropic;
KW anticonvulsant; antiparkinsonian; human; superoxide dismutase 1; SOD1;
KW G256C mutant; Gly85Arg mutant; ss.
XX
OS Synthetic.
OS Homo sapiens.
XX
PN US2003180756-A1.
XX
PD 25-SEP-2003.
XX
PF 21-NOV-2002; 2002US-00301516.
XX
PR 21-MAR-2002; 2002US-0366478P.
XX
PA (SHIY/) SHI Y.
PA (SUIG/) SUI G.
XX
PI Shi Y, Sui G;
XX
DR WPI; 2003-852231/79.
XX
PT New nucleic acids, useful for inhibiting the synthesis of a target
PT protein in a eukaryotic cell, or for treating various diseases by
PT inhibiting the expression of abnormal or mutated proteins, e.g. leukemia,
PT viral or bacterial infection.
XX
PS Disclosure; Page 16; 38pp; English.
XX
CC The present invention relates to a method for suppressing gene expression
CC in cells, particularly eukaryotic cells. The method involves a new
CC nucleic acid comprising in a 5'-3' order: an RNA polymerase promoter
CC sequence, a first target sequence that is essentially complementary to a
CC sequence of a target nucleic acid or its complement, a spacer sequence, a
CC second target sequence that is essentially complementary to the first
CC target sequence, and an RNA polymerase termination signal, where an RNA
CC transcribed from the nucleic acid can inhibit expression of the target
CC gene. The RNA transcribed from the nucleic acid may form a hairpin
CC structure. The polymerase is preferably RNA polymerase III (Pol III) and
CC the polymerase termination signal comprises a number of thymidines
CC sufficient for arresting Pol III activity. The nucleic acids and methods
CC are useful for suppressing gene expression in cells, or inhibiting the
CC synthesis of a target protein in a eukaryotic cell or in a cell of a
CC subject. The nucleic acids can be used for treating various diseases by
CC inhibiting the expression of abnormal or mutated proteins, e.g. cancers
CC such as leukaemia, haemophilia, viral or bacterial infections, and
CC neurodegenerative diseases including Alzheimer's disease, Parkinson's
CC disease, Huntington's disease and amyotrophic lateral sclerosis (ALS).
CC The present sequence represents a target DNA sequence that can be used to
CC inhibit expression of the human superoxide dismutase 1 (SOD1) G256C
CC (Gly85Arg) mutant gene.
XX
SQ Sequence 19 BP; 5 A; 3 C; 7 G; 4 T; 0 U; 0 Other;

Query Match 2.0%; Score 17.4; DB 1; Length 19;
Best Local Similarity 94.7%; Pred. No. 94;
Matches 18; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 311 GGAGACTTGGGCAATGTGA 329
||||||||| |||||||||
Db 1 GGAGACTTGCGCAATGTGA 19

RESULT 126
ADE52402/c
ID ADE52402 standard; DNA; 19 BP.
XX
AC ADE52402;
XX
DT 29-JAN-2004 (first entry)
XX
DE Target DNA sequence #2 for human SOD1 G256C (Gly85Arg) mutant gene.
XX
KW Suppression of gene expression; eukaryotic cell; RNA polymerase promoter;
KW target DNA sequence; RNA polymerase termination signal;
KW hairpin structure; RNA polymerase III; RNA Pol III; mutated protein;
KW cancer; leukaemia; haemophilia; viral infection; bacterial infection;
KW neurodegenerative disease; Alzheimer's disease; Parkinson's disease;
KW Huntington's disease; amyotrophic lateral sclerosis; ALS; cytostatic;
KW haemostatic; virucide; antibacterial; neuroprotective; nootropic;
KW anticonvulsant; antiparkinsonian; human; superoxide dismutase 1; SOD1;
KW G256C mutant; Gly85Arg mutant; ss.
XX

OS Synthetic.
OS Homo sapiens.
XX
PN US2003180756-A1.
XX
PD 25-SEP-2003.
XX
PF 21-NOV-2002; 2002US-00301516.
XX
PR 21-MAR-2002; 2002US-0366478P.
XX
PA (SHIY/) SHI Y.
PA (SUIG/) SUI G.
XX
PI Shi Y, Sui G;
XX
DR WPI; 2003-852231/79.
XX
PT New nucleic acids, useful for inhibiting the synthesis of a target
PT protein in a eukaryotic cell, or for treating various diseases by
PT inhibiting the expression of abnormal or mutated proteins, e.g. leukemia,
PT viral or bacterial infection.
XX
PS Disclosure; Page 16; 38pp; English.
XX
CC The present invention relates to a method for suppressing gene expression
CC in cells, particularly eukaryotic cells. The method involves a new
CC nucleic acid comprising in a 5'-3' order: an RNA polymerase promoter
CC sequence, a first target sequence that is essentially complementary to a
CC sequence of a target nucleic acid or its complement, a spacer sequence, a
CC second target sequence that is essentially complementary to the first
CC target sequence, and an RNA polymerase termination signal, where an RNA
CC transcribed from the nucleic acid can inhibit expression of the target
CC gene. The RNA transcribed from the nucleic acid may form a hairpin
CC structure. The polymerase is preferably RNA polymerase III (Pol III) and
CC the polymerase termination signal comprises a number of thymidines
CC sufficient for arresting Pol III activity. The nucleic acids and methods
CC are useful for suppressing gene expression in cells, or inhibiting the
CC synthesis of a target protein in a eukaryotic cell or in a cell of a
CC subject. The nucleic acids can be used for treating various diseases by
CC inhibiting the expression of abnormal or mutated proteins, e.g. cancers
CC such as leukaemia, haemophilia, viral or bacterial infections, and
CC neurodegenerative diseases including Alzheimer's disease, Parkinson's
CC disease, Huntington's disease and amyotrophic lateral sclerosis (ALS).
CC The present sequence represents a target DNA sequence that can be used to
CC inhibit expression of the human superoxide dismutase 1 (SOD1) G256C
CC (Gly85Arg) mutant gene.
XX
SQ Sequence 19 BP; 4 A; 7 C; 3 G; 5 T; 0 U; 0 Other;

```
  Query Match             2.0%;  Score 17.4;  DB 1;  Length 19;
  Best Local Similarity   94.7%;  Pred. No. 94;
  Matches   18;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        311 GGAGACTTGGGCAATGTGA 329
              ||||||||| |||||||||
Db         19 GGAGACTTGCGCAATGTGA 1
```

RESULT 127
ABZ91893
ID ABZ91893 standard; DNA; 20 BP.
XX
AC ABZ91893;
XX
DT 17-OCT-2003 (first entry)
XX
DE Human oligonucleotide sequence.
XX
KW Human; antisense; lung dysfunction; nasal airway dysfunction;
KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;
KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
KW antisense gene therapy; respiratory; lung; adenosine sensitivity;
KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
KW lung inflammation; respiratory disease; ds.
XX
OS Homo sapiens.
XX
PN WO200285308-A2.
XX
PD 31-OCT-2002.
XX
PF 23-APR-2002; 2002WO-US013135.
XX
PR 24-APR-2001; 2001US-0286137P.
XX
PA (EPIG-) EPIGENESIS PHARM INC.
XX
PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
PI Miller S, Tang L, Shahabuddin S;
XX
DR WPI; 2003-229219/22.
XX
PT Pharmaceutical composition for treating ailments associated with impaired
PT respiration, has oligo(s) antisense to specific gene(s) or its
PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
PT ubiquinone.
XX
PS Disclosure; SEQ ID NO 7135; 872pp; English.
XX
CC The invention relates to a novel pharmaceutical composition, which has a
CC first active agent comprising an oligonucleotide antisense to the
CC initiation codon, coding region, 5' or 3' end genomic flanking regions,
CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
CC junctions of genes encoding a polypeptide associated with lung and/or
CC nasal airway dysfunction and a second active agent comprising an
CC antiinflammatory steroid and ubiquinone. A composition of the invention
CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,
CC immunosuppressive, and cytostatic activity. The composition may have a
CC use in antisense gene therapy. The composition is useful for treating or
CC preventing a respiratory, lung or malignant disease or condition, also
CC for enhancing the prophylactic or therapeutic respiratory effect of an
CC antiinflammatory steroid in a subject, for reducing or depleting levels
CC of, or reducing sensitivity to adenosine, reducing levels of adenosine
CC receptor, producing bronchodilation, increasing levels of ubiquinone or
CC lung surfactant in a subject's tissue, or treating bronchoconstriction,
CC lung inflammation, lung allergies, or a respiratory disease or condition.
CC Note: The sequence data for this patent is not represented in the printed
CC specification, but was obtained in electronic format directly from WIPO
CC at ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 20 BP; 10 A; 2 C; 5 G; 3 T; 0 U; 0 Other;

```
  Query Match             2.0%;  Score 17.4;  DB 1;  Length 20;
  Best Local Similarity   94.7%;  Pred. No. 99;
  Matches   18;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        131 CAGAAGGAAAGTAATGGAC 149
              |||||| ||||||||||||
Db          1 CAGAAGAAAAGTAATGGAC 19
```

RESULT 128
ABD28123
ID ABD28123 standard; DNA; 20 BP.
XX
AC ABD28123;
XX
DT 29-JUL-2004 (first entry)
XX
DE AA156940-derived oligonucleotide SEQ ID 7135.
XX
KW Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;
KW respiratory tract inflammation; adenosine sensitivity; lung; cancer;
KW surfactant depletion; antiallergic; antiinflammatory; antiasthmatic;
KW analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis;

KW beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;
KW respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;
KW emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;
KW pulmonary transplantation rejection; ss; primer.
XX
OS Homo sapiens.
XX
PN WO200285309-A2.
XX
PD 31-OCT-2002.
XX
PF 23-APR-2002; 2002WO-US013143.
XX
PR 24-APR-2001; 2001US-0286036P.
XX
PA (EPIG-) EPIGENESIS PHARM INC.
XX
PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
PI Miller S, Tang L, Shahabuddin S;
XX
DR WPI; 2003-093058/08.
XX
PT Pharmaceutical composition for treating asthma, has antisense
PT oligonucleotide containing less percentage of adenosine, targeted to
PT nucleic acids associated with lung airway or lung dysfunction, and
PT bronchodilating agent.
XX
PS Claim 15; SEQ ID NO 7135; 763pp; English.
XX
CC This invention describes a novel composition (a) a first active agent,
CC comprising oligonucleotides, effective for alleviating
CC bronchoconstriction, respiratory tract inflammation, allergies and
CC reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,
CC surfactant depletion or hyposecretion, when administered to a mammal. The
CC oligonucleotides are derived from a gene encoding or regulating
CC expression of a target polypeptide associated with lung airway or lung
CC dysfunction or cancer and can be anti-sense to the corresponding mRNA.
CC The invention also describes a kit, that comprises: (a) a delivery
CC device, in separate containers, (b) the oligonucleotides, (c)
CC instructions for adding a carrier and for use of the kit. The composition
CC of the invention has antiallergic, antiinflammatory, antiasthmatic,
CC analgesic, hypotensive, immunosuppressive and cytostatic activity, is a
CC beta-adrenergic agonist. The composition is useful for preventing or
CC treating a respiratory, lung or malignant disease. The administered
CC composition comprises oligo and is administered to reduce the production
CC or availability, or to increase the degradation of the target mRNA or to
CC reduce the amount of target polypeptide present in the lungs. The
CC pulmonary obstruction, and/or bronchoconstriction and/or lung
CC inflammation, allergies and/or surfactant hypoproduction are associated
CC with a disease or condition such as pulmonary vasoconstriction,
CC inflammation, allergies, asthma, impeded respiration, respiratory
CC distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary
CC hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary
CC transplantation rejection, pulmonary infections, bronchitis or cancer.
CC The reduced adenosine content of the anti-sense oligos corresponding to
CC thymidines present in the target RNA serves to prevent the breakdown of
CC the oligonucleotides into products that free adenosine into the system
CC e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to
CC prevent any unwanted effects due to it
XX
SQ Sequence 20 BP; 10 A; 2 C; 5 G; 3 T; 0 U; 0 Other;

```
  Query Match             2.0%;  Score 17.4;  DB 1;  Length 20;
  Best Local Similarity   94.7%;  Pred. No. 99;
  Matches   18;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        131 CAGAAGGAAAGTAATGGAC 149
              ||||||  ||||||||||||
Db          1 CAGAAGAAAAGTAATGGAC 19
```

RESULT 129
ABS98129/c

ID ABS98129 standard; DNA; 21 BP.
XX
AC ABS98129;
XX
DT 23-DEC-2002 (first entry)
XX
DE Human multidrug resistance gene polymorphic sequence #31.
XX
KW Human; ds; cytochrome P450 A1; CYP4501A1; UGT2B4; MDR1;
KW cytochrome P450 A2; CYP4501A2; cytochrome P450 02E; CYP45002E1; LTF;
KW adrenergic receptor beta1; ADBR1; aryl hydrocarbon; AHR; MRP3; NR1I2;
KW aryl hydrocarbon receptor nuclear translocator; ARNT; cathepsin S; CTSS;
KW cyclooxgenase 2; COX2; diazepam binding inhibitor; DBI; haematological;
KW epoxide hydroxylase 2; EPHX2; 5-lipoxygenase activating protein; FLAP;
KW glutathione-S-transferase 12; GST12; histamine-N-methyl transferase;
KW HNMT; kallikrein 2; KLK2; nicotinamide-N-methyl transferase; NNMT;
KW NADPH quinone oxidoreductase 2; NQO2; sulfotransferase thermolabile; STM;
KW UDP-glucuronosyl transferase 2B4; UDP-glucuronosyl transferase 2B7;
KW UGT2B7; UDP-glucuronosyl transferase; UGT2B15; urokinase receptor; uPA;
KW multidrug resistance 1; lactotransferrin; orphan nuclear receptor;
KW multidrug resistance associated protein 3; cancer; prostate;
KW acetylcholine muscarinic receptor; CHMR1; CHMR2; CHMR3; CHMR4; CHMR5;
KW altered drug metabolism; cardiovascular function; colorectal tumour;
KW central nervous system; pulmonary; immunological; SNP;
KW single nucleotide polymorphism.
XX
OS Homo sapiens.
XX
PN WO200257410-A2.
XX
PD 25-JUL-2002.
XX
PF 28-NOV-2001; 2001WO-US044838.
XX
PR 28-NOV-2000; 2000US-00724389.
XX
PA (DNAS-) DNA SCI LAB INC.
XX
PI Guida M, Hall J;
XX
DR WPI; 2002-698522/75.
XX
PT Isolated nucleic acid molecules having polymorphisms in known human genes
PT e.g. cytochrome p450 and cathepsin S useful as genetic linkage markers
PT for locating, identifying and characterizing the genes responsible for
PT disorder-related traits.
XX
PS Example 22; Page 144; 714pp; English.
XX
CC This invention relates to the sequence of an isolated nucleic acid
CC molecule comprising at least one base variation from that of a known
CC human cytochrome P450 A1 (CYP4501A1), cytochrome P450 A2 (CYP4501A2),
CC cytochrome P450 02E1 (CYP45002E1), adrenergic receptor beta1 (ADBR1),
CC aryl hydrocarbon (AHR), aryl hydrocarbon receptor nuclear translocator
CC (ARNT), cathepsin S (CTSS), cyclooxgenase 2 (COX2), diazepam binding
CC inhibitor (DBI), epoxide hydroxylase 2 (EPHX2), 5-lipoxygenase activating
CC protein (FLAP), glutathione-S-transferase 12 (GST12), histamine-N-methyl
CC transferase (HNMT), (kallikrein 2) KLK2, nicotinamide -N-methyl
CC transferase (NNMT), NADPH quinone oxidoreductase 2 (NQO2),
CC sulfotransferase thermolabile (STM), UDP-glucuronosyl transferase 2B4
CC (UGT2B4), UDP-glucuronosyl transferase 2B7 (UGT2B7), UDP-glucuronosyl
CC transferase (UGT2B15), urokinase receptor (uPA), multidrug resistance 1
CC (MDR1), lactotransferrin (LTF), multidrug resistance associated protein 3
CC (MRP3), orphan nuclear receptor (NR1I2), or acetylcholine muscarinic
CC receptor 1, 2, 3, 4, or 5 (CHMR1, CHMR2, CHMR3, CHMR4 or CHMR5) sequence.
CC The polymorphisms in the human genes cited in the invention are useful as
CC genetic linkage markers for locating and characterising the genes that
CC are responsible for specific traits within the genome and eventually
CC identifying the genes responsible for a variety of disorder-related
CC traits as a result of their e.g., overexpression, constitutive
CC expression, mutation or underexpression, which may be used in diagnosing
CC and/or treating the disorders. The nucleic acid molecules comprising the
CC polymorphic sequences contained in CYP4501A1, CYPP4501A2, CYP4502E1,

CC ARNT, EPHX2, GST12, NNMT, NQO2, NR1I2, STM, UGT2B4, UGT2B7, UGT2B15, AHR,
CC MDR1 and/or MDR3 are useful for screening individuals for altered drug
CC metabolism. The polymorphic sequences contained in CYP4501A1, CYPP4501A2,
CC AHR, MDR1 and/or MDR3 may also be used to screen individuals for
CC susceptibility to cancer. Polymorphic sequences in ADRB1 or CHMR2 are
CC used to screen for altered cardiovascular function, in COX2 for altered
CC susceptibility to colorectal tumours, in DBI or CHMR1 for altered central
CC nervous system function, in FLAP and HNMT for altered pulmonary,
CC immunological or haematological function, in KLK2 for altered serine
CC protease activity in the prostate, in LTF for altered immunological or
CC haematological function, in CHMR3, CHMR4 or CHMR5 for altered central and
CC peripheral nervous system function. The present sequence represents a
CC polymorphic DNA sequence of the invention
XX
SQ Sequence 21 BP; 7 A; 6 C; 4 G; 4 T; 0 U; 0 Other;

Query Match 2.0%; Score 17.4; DB 1; Length 21;
Best Local Similarity 94.7%; Pred. No. 1e+02;
Matches 18; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 318 TGGGCAATGTGACTGCTGA 336
|| ||||||||||||||||
Db 21 TGTGCAATGTGACTGCTGA 3

RESULT 130
ABT36210/c
ID ABT36210 standard; DNA; 17 BP.
XX
AC ABT36210;
XX
DT 12-JUN-2003 (first entry)
XX
DE Tumour suppression related human fukutin oligo SEQ ID No 1847.
XX
KW Cytostatic; virucide; neuroprotective; nootropic; neuroleptic; gene chip;
KW antisense; sense; tumour; cell degeneration; cancer; Alzheimer's disease;
KW schizophrenia; protein chip; gene therapy; tumour suppression;
KW human fukutin; ds.
XX
OS Homo sapiens.
XX
PN WO2003025175-A2.
XX
PD 27-MAR-2003.
XX
PF 17-SEP-2002; 2002WO-IB004208.
XX
PR 17-SEP-2001; 2001FR-00011978.
XX
PA (MOLE-) MOLECULAR ENGINES LAB.
XX
PI Telerman A, Amson R, Tuijnder M;
XX
DR WPI; 2003-313353/30.
XX
PT New isolated nucleic acid, useful for treating viral diseases associated
PT with tumors and cell degeneration, also related polypeptides, antibodies
PT and transfected cells.
XX
PS Disclosure; Page 249; 720pp; French.
XX
CC The invention relates to a novel isolated 17 mer nucleic acid sequence,
CC given in the specification, a sequence containing at least 15 consecutive
CC nucleotides from the 17 mer sequence, a sequence with, after optimal
CC alignment, at least 80 % identity to the 17 mer sequence, a sequence that
CC hybridizes to them under highly stringent conditions, or the complement
CC of any of them, or the corresponding RNA. The novel isolated nucleic
CC acids of the invention are useful as probes and primers for detecting,
CC identifying, quantifying and/or amplifying a nucleic acid, e.g. as one
CC component of a gene chip, in vitro as (anti)sense reagents, and for
CC production of recombinant polypeptides. Any of the nucleic acids,
CC polypeptides, vectors containing the nucleic acids, cells containing the
CC vector or antibodies directed against the polypeptides are useful for
CC preparation of pharmaceuticals for prevention and/or treatment of viral
CC diseases that are characterised by development of tumours or cell
CC degeneration, specifically cancer but also Alzheimer's disease and
CC schizophrenia. Analysis of the expression of the 17 mer nucleic acids in
CC patient samples is useful for diagnosis and/or prognosis of these
CC diseases. The polypeptides can also be used to generate antibodies, and
CC both the polypeptide and antibodies are useful as components of protein
CC chips. The nucleic acid sequences of the invention can be used in gene
CC therapy. This polynucleotide sequence represents a tumour suppression
CC related human fukutin oligonucleotide of the invention
XX
SQ Sequence 17 BP; 7 A; 4 C; 2 G; 4 T; 0 U; 0 Other;

Query Match 1.9%; Score 17; DB 1; Length 17;
Best Local Similarity 100.0%; Pred. No. 91;
Matches 17; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 363 TTGAAGATTCTGTGATC 379
|||||||||||||||||
Db 17 TTGAAGATTCTGTGATC 1

RESULT 131
ABT39565
ID ABT39565 standard; DNA; 17 BP.
XX
AC ABT39565;
XX
DT 12-JUN-2003 (first entry)
XX
DE Tumour suppression related human fukutin oligo SEQ ID No 5202.
XX
KW Cytostatic; virucide; neuroprotective; nootropic; neuroleptic; gene chip;
KW antisense; sense; tumour; cell degeneration; cancer; Alzheimer's disease;
KW schizophrenia; protein chip; gene therapy; tumour suppression;
KW human fukutin; ds.
XX
OS Homo sapiens.
XX
PN WO2003025175-A2.
XX
PD 27-MAR-2003.
XX
PF 17-SEP-2002; 2002WO-IB004208.
XX
PR 17-SEP-2001; 2001FR-00011978.
XX
PA (MOLE-) MOLECULAR ENGINES LAB.
XX
PI Telerman A, Amson R, Tuijnder M;
XX
DR WPI; 2003-313353/30.
XX
PT New isolated nucleic acid, useful for treating viral diseases associated
PT with tumors and cell degeneration, also related polypeptides, antibodies
PT and transfected cells.
XX
PS Disclosure; Page 642; 720pp; French.
XX
CC The invention relates to a novel isolated 17 mer nucleic acid sequence,
CC given in the specification, a sequence containing at least 15 consecutive
CC nucleotides from the 17 mer sequence, a sequence with, after optimal
CC alignment, at least 80 % identity to the 17 mer sequence, a sequence that
CC hybridizes to them under highly stringent conditions, or the complement
CC of any of them, or the corresponding RNA. The novel isolated nucleic
CC acids of the invention are useful as probes and primers for detecting,
CC identifying, quantifying and/or amplifying a nucleic acid, e.g. as one
CC component of a gene chip, in vitro as (anti)sense reagents, and for
CC production of recombinant polypeptides. Any of the nucleic acids,
CC polypeptides, vectors containing the nucleic acids, cells containing the
CC vector or antibodies directed against the polypeptides are useful for
CC preparation of pharmaceuticals for prevention and/or treatment of viral

CC diseases that are characterised by development of tumours or cell
CC degeneration, specifically cancer but also Alzheimer's disease and
CC schizophrenia. Analysis of the expression of the 17 mer nucleic acids in
CC patient samples is useful for diagnosis and/or prognosis of these
CC diseases. The polypeptides can also be used to generate antibodies, and
CC both the polypeptide and antibodies are useful as components of protein
CC chips. The nucleic acid sequences of the invention can be used in gene
CC therapy. This polynucleotide sequence represents a tumour suppression
CC related human fukutin oligonucleotide of the invention
XX
SQ Sequence 17 BP; 5 A; 2 C; 4 G; 6 T; 0 U; 0 Other;

Query Match 1.9%; Score 17; DB 1; Length 17;
Best Local Similarity 100.0%; Pred. No. 91;
Matches 17; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 690 GATCACTTGGAAGATTT 706
||||||||||||||||
Db 1 GATCACTTGGAAGATTT 17

RESULT 132
ADI49574
ID ADI49574 standard; DNA; 17 BP.
XX
AC ADI49574;
XX
DT 15-APR-2004 (first entry)
XX
DE Human tumour suppression/reversion-related DNA sequence SeqID2077.
XX
KW tumour suppression; tumour reversion; apoptosis; virus resistance;
KW cytostatic; virucide; neuroprotective; nootropic; neuroleptic; probe;
KW primer; PCR; gene chip; antisense; viral disease; tumour;
KW cell degeneration; cancer; Alzheimer's disease; schizophrenia; ds; human.
XX
OS Homo sapiens.
XX
PN WO2003025177-A2.
XX
PD 27-MAR-2003.
XX
PF 17-SEP-2002; 2002WO-IB004523.
XX
PR 17-SEP-2001; 2001FR-00011980.
XX
PA (MOLE-) MOLECULAR ENGINES LAB.
XX
PI Telerman A, Amson R, Tuijnder M;
XX
DR WPI; 2003-313354/30.
XX
PT New isolated nucleic acid, useful for treating viral diseases associated
PT with tumors and cell degeneration, also related polypeptides, antibodies
PT and transfected cells.
XX
PS Disclosure; SEQ ID NO 2077; 30pp; French.
XX
CC This invention relates to novel isolated nucleic acid sequences involved
CC in the phenomena of tumour suppression, tumour reversion, apoptosis
CC and/or resistance to viruses. The invention may be useful for the
CC development of compounds with a cytostatic, virucide, neuroprotective,
CC nootropic or neuroleptic activity. The DNA sequences may be useful as
CC probes and primers for detecting, indentifying, quantifying and/or
CC amplifying nucleic acid, for example as one component of a gene chip, in
CC vitro as antisense reagents and for production of recombinant
CC polypeptides. The invention may therefore be useful for preparation of
CC pharmaceuticals for prevention and/or treatment of viral diseases that
CC are characterised by development of tumours or cell degeneration,
CC specifically cancer but also Alzheimer's disease and schizophrenia. The
CC present sequence is that of a nucleic acid sequence of the invention.
CC Note: The sequence data for this patent did not form part of the printed
CC specification, but was obtained in electronic format directly from WIPO
CC at ftp.wipo.int/pub/publishedpct_sequences
XX
SQ Sequence 17 BP; 5 A; 2 C; 4 G; 6 T; 0 U; 0 Other;

Query Match 1.9%; Score 17; DB 1; Length 17;
Best Local Similarity 100.0%; Pred. No. 91;
Matches 17; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 690 GATCACTTGGAAGATTT 706
||||||||||||||||
Db 1 GATCACTTGGAAGATTT 17

RESULT 133
ADI52307
ID ADI52307 standard; DNA; 17 BP.
XX
AC ADI52307;
XX
DT 15-APR-2004 (first entry)
XX
DE Human tumour suppression/reversion-related DNA sequence SeqID4810.
XX
KW tumour suppression; tumour reversion; apoptosis; virus resistance;
KW cytostatic; virucide; neuroprotective; nootropic; neuroleptic; probe;
KW primer; PCR; gene chip; antisense; viral disease; tumour;
KW cell degeneration; cancer; Alzheimer's disease; schizophrenia; ds; human.
XX
OS Homo sapiens.
XX
PN WO2003025177-A2.
XX
PD 27-MAR-2003.
XX
PF 17-SEP-2002; 2002WO-IB004523.
XX
PR 17-SEP-2001; 2001FR-00011980.
XX
PA (MOLE-) MOLECULAR ENGINES LAB.
XX
PI Telerman A, Amson R, Tuijnder M;
XX
DR WPI; 2003-313354/30.
XX
PT New isolated nucleic acid, useful for treating viral diseases associated
PT with tumors and cell degeneration, also related polypeptides, antibodies
PT and transfected cells.
XX
PS Disclosure; SEQ ID NO 4810; 30pp; French.
XX
CC This invention relates to novel isolated nucleic acid sequences involved
CC in the phenomena of tumour suppression, tumour reversion, apoptosis
CC and/or resistance to viruses. The invention may be useful for the
CC development of compounds with a cytostatic, virucide, neuroprotective,
CC nootropic or neuroleptic activity. The DNA sequences may be useful as
CC probes and primers for detecting, indentifying, quantifying and/or
CC amplifying nucleic acid, for example as one component of a gene chip, in
CC vitro as antisense reagents and for production of recombinant
CC polypeptides. The invention may therefore be useful for preparation of
CC pharmaceuticals for prevention and/or treatment of viral diseases that
CC are characterised by development of tumours or cell degeneration,
CC specifically cancer but also Alzheimer's disease and schizophrenia. The
CC present sequence is that of a nucleic acid sequence of the invention.
CC Note: The sequence data for this patent did not form part of the printed
CC specification, but was obtained in electronic format directly from WIPO
CC at ftp.wipo.int/pub/publishedpct_sequences
XX
SQ Sequence 17 BP; 7 A; 5 C; 2 G; 3 T; 0 U; 0 Other;

Query Match 1.9%; Score 17; DB 1; Length 17;
Best Local Similarity 100.0%; Pred. No. 91;
Matches 17; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```
Qy        517 GATCGCCCAATAAACAT 533
              |||||||||||||||||
Db          1 GATCGCCCAATAAACAT 17
```

```
RESULT 134
ACC53333
ID   ACC53333 standard; DNA; 17 BP.
XX
AC   ACC53333;
XX
DT   27-JUN-2003  (first entry)
XX
DE   Human tumour suppressor sequence #2100.
XX
KW   ss; tumour suppressor; antitumour; cytostatic; tumour suppression;
KW   tumour regression; apoptosis; virus resistance; diagnosis;
KW   cellular degeneration.
XX
OS   Homo sapiens.
XX
PN   FR2826373-A1.
XX
PD   27-DEC-2002.
XX
PF   20-JUN-2001; 2001FR-00008139.
XX
PR   20-JUN-2001; 2001FR-00008139.
XX
PA   (MOLE-) MOLECULAR ENGINES LAB SA.
XX
PI   Tuijnder M,  Telerman A,  Amson R;
XX
DR   WPI; 2003-250498/25.
XX
PT   New nucleic acid sequences associated with tumor suppression, regression,
PT   apoptosis or virus resistance are useful to diagnose and treat viral
PT   disease, development of tumor cells and cell degeneration.
XX
PS   Claim 1; Page 525; 798pp; French.
XX
CC   This sequence represents an isolated nucleic acid sequence associated
CC   with tumour suppression or regression, apoptosis or virus resistance. The
CC   invention relates to these sequences or sequences having at least 80%
CC   identity to them, and polypeptides encoded by the sequences or
CC   polypeptides having 80% identity to the polypeptide sequences. The
CC   invention is used to diagnose or treat viral disease or disease
CC   characterized by development of tumour cells or cellular degeneration
XX
SQ   Sequence 17 BP; 7 A; 5 C; 2 G; 3 T; 0 U; 0 Other;

  Query Match             1.9%;  Score 17;  DB 1;  Length 17;
  Best Local Similarity   100.0%;  Pred. No. 91;
  Matches   17;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        517 GATCGCCCAATAAACAT 533
              |||||||||||||||||
Db          1 GATCGCCCAATAAACAT 17
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RESULT 135
ACC51634
ID   ACC51634 standard; DNA; 17 BP.
XX
AC   ACC51634;
XX
DT   27-JUN-2003  (first entry)
XX
DE   Human tumour suppressor sequence #401.
XX
KW   ss; tumour suppressor; antitumour; cytostatic; tumour suppression;
KW   tumour regression; apoptosis; virus resistance; diagnosis;
KW   cellular degeneration.
XX
OS   Homo sapiens.
XX
PN   FR2826373-A1.
XX
PD   27-DEC-2002.
XX
PF   20-JUN-2001; 2001FR-00008139.
XX
PR   20-JUN-2001; 2001FR-00008139.
XX
PA   (MOLE-) MOLECULAR ENGINES LAB SA.
XX
PI   Tuijnder M,  Telerman A,  Amson R;
XX
DR   WPI; 2003-250498/25.
XX
PT   New nucleic acid sequences associated with tumor suppression, regression,
PT   apoptosis or virus resistance are useful to diagnose and treat viral
PT   disease, development of tumor cells and cell degeneration.
XX
PS   Claim 1; Page 133; 798pp; French.
XX
CC   This sequence represents an isolated nucleic acid sequence associated
CC   with tumour suppression or regression, apoptosis or virus resistance. The
CC   invention relates to these sequences or sequences having at least 80%
CC   identity to them, and polypeptides encoded by the sequences or
CC   polypeptides having 80% identity to the polypeptide sequences. The
CC   invention is used to diagnose or treat viral disease or disease
CC   characterized by development of tumour cells or cellular degeneration
XX
SQ   Sequence 17 BP; 5 A; 2 C; 4 G; 6 T; 0 U; 0 Other;

  Query Match             1.9%;  Score 17;  DB 1;  Length 17;
  Best Local Similarity   100.0%;  Pred. No. 91;
  Matches   17;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        690 GATCACTTGGAAGATTT 706
              |||||||||||||||||
Db          1 GATCACTTGGAAGATTT 17
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```
RESULT 136
ABQ75416
ID   ABQ75416 standard; DNA; 19 BP.
XX
AC   ABQ75416;
XX
DT   06-NOV-2002  (first entry)
XX
DE   CuZn superoxide dismutase (CuZn-SOD) PCR primer SEQ ID NO:13.
XX
KW   AOP-1; cardiant; nootropic; neuroprotective; antirheumatic; nephrotropic;
KW   hepatotropic; heart disease; neurodegenerative disease; rheumatism;
KW   kidney disease; liver disease; CuZn superoxide dismutase; CuZn-SOD;
KW   PCR primer; ss.
XX
OS   Synthetic.
XX
PN   WO200264169-A1.
XX
PD   22-AUG-2002.
XX
PF   18-FEB-2002; 2002WO-JP001358.
XX
PR   16-FEB-2001; 2001JP-00041003.
XX
PA   (SUNR ) SUNTORY LTD.
PA   (SUNR ) SUNTORY BIOMEDICAL RES LTD.
XX
PI   Hattori F,  Sugimura K,  Furuya M;
XX
DR   WPI; 2002-657567/70.
```

```
XX
PT   Remedies for treating diseases associated with a decrease in expression
PT   of AOP-1 gene or AOP-1, also drug screening with the protein and encoded
PT   gene, applicable e.g. in heart diseases, neurodegenerative diseases and
PT   rheumatism.
XX
PS   Example 3; Page 31; 96pp; Japanese.
XX
CC   The present invention describes a method for preventing or treating
CC   diseases associated with a decrease in the expression of AOP-1 gene or
CC   AOP-1 comprises: (a) transferring e.g. a nucleic acid encoding AOP-1 gene
CC   ; or (b) administering a substance enhancing the expression of AOP-1
CC   gene, a substance enhancing production of AOP-1 or a substance enhancing
CC   the function of AOP-1. AOP-1 has cardiant, nootropic, neuroprotective,
CC   antirheumatic, nephrotropic and hepatotropic activities. The method can
CC   be used for treating diseases associated with a decrease in the
CC   expression of AOP-1 gene or AOP-1, including heart diseases,
CC   neurodegenerative diseases, rheumatism, kidney diseases and liver
CC   diseases. The present sequence represents a PCR primer for CuZn
CC   superoxide dismutase (CuZn-SOD), which is used in an example from the
CC   present invention
XX
SQ   Sequence 19 BP; 6 A; 2 C; 9 G; 2 T; 0 U; 0 Other;

  Query Match             1.9%;  Score 17;  DB 1;  Length 19;
  Best Local Similarity   100.0%;  Pred. No. 1e+02;
  Matches   17;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        292 GGATGAAGAGAGGCATG 308
              |||||||||||||||||
Db          3 GGATGAAGAGAGGCATG 19


RESULT 137
AAQ67479/c
ID   AAQ67479 standard; DNA; 21 BP.
XX
AC   AAQ67479;
XX
DT   25-MAR-2003  (revised)
DT   31-MAY-1995  (first entry)
XX
DE   PCR primer for human SOD1 exon 2.
XX
KW   Human superoxide dismutase; hSOD1; neurodegeneration;
KW   Alzheimer's disease; Parkinson's disease; Huntington's disease;
KW   Hallervorden-Spatz disease; olivopontocerebellar atrophy;
KW   familial amyotrophic lateral sclerosis; FALS; diagnosis; mutant SOD;
KW   SSCP analysis; ss.
XX
OS   Synthetic.
XX
PN   WO9419493-A1.
XX
PD   01-SEP-1994.
XX
PF   28-FEB-1994;   94WO-US002089.
XX
PR   26-FEB-1993;   93US-00023980.
XX
PA   (GEHO ) GEN HOSPITAL CORP.
PA   (MASI ) MASSACHUSETTS INST TECHNOLOGY.
XX
PI   Brown R,  Horvitz HR,  Rosen DR;
XX
DR   WPI; 1994-294353/36.
XX
PT   Diagnosis, treatment and prevention of diseases of cell death - e.g.
PT   amyotrophic lateral sclerosis, which are the result of e.g. decreased SOD
PT   activity.
XX
PS   Claim 8; Fig 5; 94pp; English.
XX
CC   The presence of a mutation in a gene encoding a superoxide dismutase
CC   (SOD1, SOD2 or SOD3) indicates an increased likelihood of developing a
CC   cell death disease, specifically a neurodegenerative disease. The DNA can
CC   be analysed to detect mutant SOD sequences. Analysis is pref. preceded by
CC   a PCR amplification step. AAQ67476- AAQ67485 are examples of PCR primers
CC   which are useful for diagnosis of diseases linked to SOD1 mutations.
CC   (Updated on 25-MAR-2003 to correct PN field.)
XX
SQ   Sequence 21 BP; 3 A; 9 C; 2 G; 7 T; 0 U; 0 Other;

  Query Match             1.9%;  Score 17;  DB 1;  Length 21;
  Best Local Similarity   100.0%;  Pred. No. 1.1e+02;
  Matches   17;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        218 GGAGATAATACAGCAGG 234
              |||||||||||||||||
Db         21 GGAGATAATACAGCAGG 5


RESULT 138
AAV73829/c
ID   AAV73829 standard; DNA; 21 BP.
XX
AC   AAV73829;
XX
DT   24-FEB-1999  (first entry)
XX
DE   Human SOD1 exon 2 PCR primer #2.
XX
KW   SOD1; SOD2; SOD3; Cu/Zn; superoxide dismutase; mitochondrial; treatment;
KW   extracellular; neurogenerative disease; amyotrophic lateral sclerosis;
KW   familial; ALS; PCR primer; ss.
XX
OS   Synthetic.
OS   Homo sapiens.
XX
PN   US5849290-A.
XX
PD   15-DEC-1998.
XX
PF   07-JUN-1995;   95US-00486953.
XX
PR   26-FEB-1993;   93US-00023980.
PR   28-FEB-1994;   94US-00204052.
XX
PA   (MASI ) MASSACHUSETTS INST TECHNOLOGY.
PA   (GEHO ) GEN HOSPITAL CORP.
XX
PI   Rosen DR,  Brown R,  Horvitz HR;
XX
DR   WPI; 1999-069657/06.
XX
PT   Treatment of neurodegenerative disease - by administering super-oxide
PT   dismutase.
XX
PS   Disclosure; Fig 5; 53pp; English.
XX
CC   AAV73826-V73835 are PCR primers used in the amplification of a novel
CC   human SOD1 gene which encodes a Cu/Zn SOD (superoxide dismutase) protein.
CC   This protein can be used in a method for treating a neurodegenerative
CC   disease particularly familial amyotrophic lateral sclerosis (ALS)
XX
SQ   Sequence 21 BP; 3 A; 9 C; 2 G; 7 T; 0 U; 0 Other;

  Query Match             1.9%;  Score 17;  DB 1;  Length 21;
  Best Local Similarity   100.0%;  Pred. No. 1.1e+02;
  Matches   17;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        218 GGAGATAATACAGCAGG 234
              |||||||||||||||||
Db         21 GGAGATAATACAGCAGG 5
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RESULT 139
ADO55692/c
ID   ADO55692 standard; DNA; 21 BP.
XX
AC   ADO55692;
XX
DT   15-JUL-2004  (first entry)
XX
DE   Human cytosolic superoxide dismutase (Cu/ZnSOD) DNA, SOD1 PCR primer #4.
XX
KW   Human; cytosolic superoxide dismutase; Cu/ZnSOD; SOD; SOD1; PCR; ss;
KW   neurodegenerative disease; cell death disease; FALS; neoplasm; primer.
XX
OS   Homo sapiens.
XX
PN   US6723893-B1.
XX
PD   20-APR-2004.
XX
PF   28-FEB-1994;   94US-00204052.
XX
PR   26-FEB-1993;   93US-00023980.
XX
PA   (MASI ) MASSACHUSETTS INST TECHNOLOGY.
PA   (GEHO ) GEN HOSPITAL CORP INC.
XX
PI   Brown R,  Horvitz HR,  Rosen DR;
XX
DR   WPI; 2004-326924/30.
XX
PT   New transgenic mouse having somatic and germ cells containing a transgene
PT   encoding and expressing a neurodegenerative disease-causing mutant SOD-1
PT   polypeptide, useful for research or drug development.
XX
PS   Disclosure; SEQ ID NO 7; 54pp; English.
XX
CC   The invention relates to a transgenic mouse having somatic and germ cells
CC   containing a transgene encoding and expressing a neurodegenerative
CC   disease-causing mutant SOD1 polypeptide. The invention also relates to a
CC   method of diagnosing an increased likelihood of developing cell death
CC   disease in a patient, a kit for the diagnosis of cell death disease in a
CC   patient, a method of treating a patient with a disease involving a mutant
CC   SOD encoding gene, antibodies reactive with a FALS polypeptide, a method
CC   of treating a patient with a neoplasm, a bacterial or yeast cell
CC   containing a purified nucleic acid derived from a FALS gene, a purified
CC   DNA encoding a purified FALS polypeptide and a purified FALS polypeptide.
CC   The SOD1 polypeptide is a murine or human SOD1 polypeptide. The
CC   expression of the mutant polypeptide is under the regulation of the wild-
CC   type promoter. The transgenic mouse is useful for research or drug
CC   development. This sequence represents a PCR primer used to amplify SOD1
CC   DNA encoding the human cytosolic superoxide dismutase (Cu/ZnSOD)
CC   polypeptide.
XX
SQ   Sequence 21 BP; 3 A; 9 C; 2 G; 7 T; 0 U; 0 Other;

  Query Match             1.9%;  Score 17;  DB 1;  Length 21;
  Best Local Similarity   100.0%;  Pred. No. 1.1e+02;
  Matches   17;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        218 GGAGATAATACAGCAGG 234
              |||||||||||||||||
Db         21 GGAGATAATACAGCAGG 5


RESULT 140
ADO55743/c
ID   ADO55743 standard; DNA; 21 BP.
XX
AC   ADO55743;
XX
DT   15-JUL-2004  (first entry)
XX
DE   Human cytosolic superoxide dismutase (Cu/ZnSOD) DNA, SOD1 PCR primer #13.
XX
KW   Human; cytosolic superoxide dismutase; Cu/ZnSOD; SOD; SOD1; PCR; ss;
KW   neurodegenerative disease; cell death disease; FALS; neoplasm; primer.
XX
OS   Homo sapiens.
XX
PN   US6723893-B1.
XX
PD   20-APR-2004.
XX
PF   28-FEB-1994;   94US-00204052.
XX
PR   26-FEB-1993;   93US-00023980.
XX
PA   (MASI ) MASSACHUSETTS INST TECHNOLOGY.
PA   (GEHO ) GEN HOSPITAL CORP INC.
XX
PI   Brown R,  Horvitz HR,  Rosen DR;
XX
DR   WPI; 2004-326924/30.
XX
PT   New transgenic mouse having somatic and germ cells containing a transgene
PT   encoding and expressing a neurodegenerative disease-causing mutant SOD-1
PT   polypeptide, useful for research or drug development.
XX
PS   Example; Col 17-18; 54pp; English.
XX
CC   The invention relates to a transgenic mouse having somatic and germ cells
CC   containing a transgene encoding and expressing a neurodegenerative
CC   disease-causing mutant SOD1 polypeptide. The invention also relates to a
CC   method of diagnosing an increased likelihood of developing cell death
CC   disease in a patient, a kit for the diagnosis of cell death disease in a
CC   patient, a method of treating a patient with a disease involving a mutant
CC   SOD encoding gene, antibodies reactive with a FALS polypeptide, a method
CC   of treating a patient with a neoplasm, a bacterial or yeast cell
CC   containing a purified nucleic acid derived from a FALS gene, a purified
CC   DNA encoding a purified FALS polypeptide and a purified FALS polypeptide.
CC   The SOD1 polypeptide is a murine or human SOD1 polypeptide. The
CC   expression of the mutant polypeptide is under the regulation of the wild-
CC   type promoter. The transgenic mouse is useful for research or drug
CC   development. This sequence represents a PCR primer used to amplify SOD1
CC   DNA encoding the human cytosolic superoxide dismutase (Cu/ZnSOD)
CC   polypeptide.
XX
SQ   Sequence 21 BP; 3 A; 9 C; 2 G; 7 T; 0 U; 0 Other;

  Query Match             1.9%;  Score 17;  DB 1;  Length 21;
  Best Local Similarity   100.0%;  Pred. No. 1.1e+02;
  Matches   17;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        218 GGAGATAATACAGCAGG 234
              |||||||||||||||||
Db         21 GGAGATAATACAGCAGG 5


RESULT 141
AAT38674/c
ID   AAT38674 standard; DNA; 20 BP.
XX
AC   AAT38674;
XX
DT   21-JUL-1997  (first entry)
XX
DE   Mouse SOD-1 exon 4 PCR primer EH129r.
XX
KW   Murine; mouse; amyloid; precursor; protein; APP; SOD-1; humanisation;
KW   homozygous; heterozygous; human; Abeta; Swedish; familial; Alzheimer's;
KW   disease; FAD; mutation; tool; model; elucidation; pathology;
KW   symptomatology; screen; inhibition; transgenic;
KW   polymerase chain reaction; primer; PCR; amplification; exon 4; ss.
XX
OS   Synthetic.
XX
```

PN WO9634097-A1.
XX
PD 31-OCT-1996.
XX
PF 26-APR-1996; 96WO-US005824.
XX
PR 26-APR-1995; 95US-00429207.
PR 23-APR-1996; 96US-00636876.
XX
PA (CEPH-) CEPHALON INC.
XX
PI Scott RW, Reaume AG, Trusko SP, Siman R, Hoffman EK;
XX
DR WPI; 1996-497629/49.
XX
PT Transgenic mice with humanised amyloid precursor protein gene - having at
PT least 1 Swedish FAD mutation, useful as tools or models to elucidate role
PT of human A-beta in Alzheimer's disease.
XX
PS Example 16; Page 68; 123pp; English.
XX
CC The present sequence is a primer for the PCR amplification of exon 4 of
CC the murine SOD-1 gene, which was used to distinguish SOD deficient mice
CC that have lost both or 1 copy of the SOD-1 gene. The SOD-1 deficient mice
CC were used in the preparation of mice homozygous or heterozygous for a
CC targeted amyloid precursor protein (APP) encoding gene, comprising a
CC human Abeta peptide encoding sequence in place of the endogenous murine
CC sequence, and at least 1 Swedish Familial Alzheimer's Disease (FAD)
CC mutation. The mice can be used as tools, or models to elucidate the role
CC of human Abeta in AD pathology and symptomatology. They can also be used
CC to screen chemical compounds for the ability to inhibit in vivo
CC processing of APP, to yield the human Abeta peptide by administering the
CC chemical compounds to a mouse and measuring the relative amounts of
CC amyloidogenic and nonamyloidogenic processing of APP in a sample from the
CC mouse at an appropriate interval after administration of the chemical
CC compounds
XX
SQ Sequence 20 BP; 5 A; 6 C; 4 G; 5 T; 0 U; 0 Other;

Query Match 1.9%; Score 16.8; DB 1; Length 20;
Best Local Similarity 90.0%; Pred. No. 1.1e+02;
Matches 18; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 389 GGAGACCATTGCATCATTGG 408
||||| |||| |||||||||
Db 20 GGAGAGCATTCCATCATTGG 1

RESULT 142
AAT93934/c
ID AAT93934 standard; DNA; 20 BP.
XX
AC AAT93934;
XX
DT 03-FEB-1998 (first entry)
XX
DE Primer for exon 23 of endothelial nitrogen monoxide synthase gene.
XX
KW Exon 23; PCR primer; single stranded conformational polymorphism; SSCP;
KW analysis; endothelial nitrogen monoxide synthase; eNOS;
KW genetic screening; coronary arterial spasm; angina pectoris; ss.
XX
OS Synthetic.
OS Homo sapiens.
XX
PN WO9718327-A1.
XX
PD 22-MAY-1997.
XX
PF 13-NOV-1996; 96WO-JP003324.
XX
PR 13-NOV-1995; 95JP-00319504.
PR 28-JUN-1996; 96JP-00168761.
XX
PA (SHIO) SHIONOGI & CO LTD.
XX
PI Yasue H, Yoshimura M;
XX
DR WPI; 1997-289303/26.
XX
PT Genetic screening for diseases associated with coronary arterial spasm -
PT by assessment of the occurrence of specific mutation(s) of the
PT endothelial nitrogen monoxide synthase gene.
XX
PS Example 1; Page 14; 47pp; Japanese.
XX
CC The present sequence is an exon 23 primer for the polymerase chain
CC reaction-single stranded conformational polymorphism (PCR-SSCP) analysis
CC of the endothelial nitrogen monoxide synthase (eNOS) gene. The PCR-SSCP
CC analysis was used in an example of genetic screening method for diseases
CC associated with coronary arterial spasm, which comprises determining if 1
CC or more specific nucleotides in the eNOS gene have been substituted,
CC specifically G894T, C774T, T(-786)C, A(-922)G and T(-1468)A. Screening
CC for diseases associated with coronary spasm, e.g angina pectoris, cannot
CC be easily carried out by existing methods, this method allows rapid and
CC easy detection
XX
SQ Sequence 20 BP; 3 A; 5 C; 5 G; 7 T; 0 U; 0 Other;

Query Match 1.9%; Score 16.8; DB 1; Length 20;
Best Local Similarity 90.0%; Pred. No. 1.1e+02;
Matches 18; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 168 GCATTAAAGGACTGACTGAA 187
||| |||||||||| |||||
Db 20 GCACTAAAGGACTGCCTGAA 1

RESULT 143
AAQ67482
ID AAQ67482 standard; DNA; 21 BP.
XX
AC AAQ67482;
XX
DT 25-MAR-2003 (revised)
DT 31-MAY-1995 (first entry)
XX
DE PCR primer for human SOD1 exon 4.
XX
KW Human superoxide dismutase; hSOD1; neurodegeneration;
KW Alzheimer's disease; Parkinson's disease; Huntington's disease;
KW Hallervorden-Spatz disease; olivopontocerebellar atrophy;
KW familial amyotrophic lateral sclerosis; FALS; diagnosis; mutant SOD;
KW SSCP analysis; ss.
XX
OS Synthetic.
XX
PN WO9419493-A1.
XX
PD 01-SEP-1994.
XX
PF 28-FEB-1994; 94WO-US002089.
XX
PR 26-FEB-1993; 93US-00023980.
XX
PA (GEHO) GEN HOSPITAL CORP.
PA (MASI) MASSACHUSETTS INST TECHNOLOGY.
XX
PI Brown R, Horvitz HR, Rosen DR;
XX
DR WPI; 1994-294353/36.
XX
PT Diagnosis, treatment and prevention of diseases of cell death - e.g.
PT amyotrophic lateral sclerosis, which are the result of e.g. decreased SOD
PT activity.
XX

```
PS   Claim 8; Fig 5; 94pp; English.
XX
CC   The presence of a mutation in a gene encoding a superoxide dismutase
CC   (SOD1, SOD2 or SOD3) indicates an increased likelihood of developing a
CC   cell death disease, specifically a neurodegenerative disease. The DNA can
CC   be analysed to detect mutant SOD sequences. Analysis is pref. preceded by
CC   a PCR amplification step. AAQ67476- AAQ67485 are examples of PCR primers
CC   which are useful for diagnosis of diseases linked to SOD1 mutations.
CC   (Updated on 25-MAR-2003 to correct PN field.)
XX
SQ   Sequence 21 BP; 6 A; 3 C; 6 G; 6 T; 0 U; 0 Other;

  Query Match             1.9%;  Score 16.8;  DB 1;  Length 21;
  Best Local Similarity   90.0%;  Pred. No. 1.2e+02;
  Matches   18;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        298 AGAGAGGCATGTTGGAGACT 317
              | | ||||||||||||||||
Db          2 ATATAGGCATGTTGGAGACT 21


RESULT 144
AAV73832
ID   AAV73832 standard; DNA; 21 BP.
XX
AC   AAV73832;
XX
DT   24-FEB-1999  (first entry)
XX
DE   Human SOD1 exon 4 PCR primer #1.
XX
KW   SOD1; SOD2; SOD3; Cu/Zn; superoxide dismutase; mitochondrial; treatment;
KW   extracellular; neurogenerative disease; amyotrophic lateral sclerosis;
KW   familial; ALS; PCR primer; ss.
XX
OS   Synthetic.
OS   Homo sapiens.
XX
PN   US5849290-A.
XX
PD   15-DEC-1998.
XX
PF   07-JUN-1995;   95US-00486953.
XX
PR   26-FEB-1993;   93US-00023980.
PR   28-FEB-1994;   94US-00204052.
XX
PA   (MASI ) MASSACHUSETTS INST TECHNOLOGY.
PA   (GEHO ) GEN HOSPITAL CORP.
XX
PI   Rosen DR,  Brown R,  Horvitz HR;
XX
DR   WPI; 1999-069657/06.
XX
PT   Treatment of neurodegenerative disease - by administering super-oxide
PT   dismutase.
XX
PS   Disclosure; Fig 5; 53pp; English.
XX
CC   AAV73826-V73835 are PCR primers used in the amplification of a novel
CC   human SOD1 gene which encodes a Cu/Zn SOD (superoxide dismutase) protein.
CC   This protein can be used in a method for treating a neurodegenerative
CC   disease particularly familial amyotrophic lateral sclerosis (ALS)
XX
SQ   Sequence 21 BP; 6 A; 3 C; 6 G; 6 T; 0 U; 0 Other;

  Query Match             1.9%;  Score 16.8;  DB 1;  Length 21;
  Best Local Similarity   90.0%;  Pred. No. 1.2e+02;
  Matches   18;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        298 AGAGAGGCATGTTGGAGACT 317
              | | ||||||||||||||||
Db          2 ATATAGGCATGTTGGAGACT 21


RESULT 145
ADO55695
ID   ADO55695 standard; DNA; 21 BP.
XX
AC   ADO55695;
XX
DT   15-JUL-2004  (first entry)
XX
DE   Human cytosolic superoxide dismutase (Cu/ZnSOD) DNA, SOD1 PCR primer #7.
XX
KW   Human; cytosolic superoxide dismutase; Cu/ZnSOD; SOD; SOD1; PCR; ss;
KW   neurodegenerative disease; cell death disease; FALS; neoplasm; primer.
XX
OS   Homo sapiens.
XX
PN   US6723893-B1.
XX
PD   20-APR-2004.
XX
PF   28-FEB-1994;   94US-00204052.
XX
PR   26-FEB-1993;   93US-00023980.
XX
PA   (MASI ) MASSACHUSETTS INST TECHNOLOGY.
PA   (GEHO ) GEN HOSPITAL CORP INC.
XX
PI   Brown R,  Horvitz HR,  Rosen DR;
XX
DR   WPI; 2004-326924/30.
XX
PT   New transgenic mouse having somatic and germ cells containing a transgene
PT   encoding and expressing a neurodegenerative disease-causing mutant SOD-1
PT   polypeptide, useful for research or drug development.
XX
PS   Disclosure; SEQ ID NO 10; 54pp; English.
XX
CC   The invention relates to a transgenic mouse having somatic and germ cells
CC   containing a transgene encoding and expressing a neurodegenerative
CC   disease-causing mutant SOD1 polypeptide. The invention also relates to a
CC   method of diagnosing an increased likelihood of developing cell death
CC   disease in a patient, a kit for the diagnosis of cell death disease in a
CC   patient, a method of treating a patient with a disease involving a mutant
CC   SOD encoding gene, antibodies reactive with a FALS polypeptide, a method
CC   of treating a patient with a neoplasm, a bacterial or yeast cell
CC   containing a purified nucleic acid derived from a FALS gene, a purified
CC   DNA encoding a purified FALS polypeptide and a purified FALS polypeptide.
CC   The SOD1 polypeptide is a murine or human SOD1 polypeptide. The
CC   expression of the mutant polypeptide is under the regulation of the wild-
CC   type promoter. The transgenic mouse is useful for research or drug
CC   development. This sequence represents a PCR primer used to amplify SOD1
CC   DNA encoding the human cytosolic superoxide dismutase (Cu/ZnSOD)
CC   polypeptide.
XX
SQ   Sequence 21 BP; 6 A; 3 C; 6 G; 6 T; 0 U; 0 Other;

  Query Match             1.9%;  Score 16.8;  DB 1;  Length 21;
  Best Local Similarity   90.0%;  Pred. No. 1.2e+02;
  Matches   18;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        298 AGAGAGGCATGTTGGAGACT 317
              | | ||||||||||||||||
Db          2 ATATAGGCATGTTGGAGACT 21


RESULT 146
ADI79800/c
ID   ADI79800 standard; DNA; 20 BP.
XX
AC   ADI79800;
XX
DT   22-APR-2004  (first entry)
```

```
XX
DE   Human HMG-CoA reductase antisense oligonucleotide, SEQ ID No 323.
XX
KW   HMG-CoA reductase; 3-hydroxy-3-methylglutaryl-Coenzyme A;
KW   HMG-CoA reductase; cardiant; antiarteriosclerotic; antilipaemic;
KW   antisense gene therapy; cardiovascular disorder; cholesterol metabolism;
KW   human; ss.
XX
OS   Homo sapiens.
XX
PN   US2004006031-A1.
XX
PD   08-JAN-2004.
XX
PF   02-JUL-2002; 2002US-00190366.
XX
PR   02-JUL-2002; 2002US-00190366.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Dean NM,  Freier SM,  Dobie KW;
XX
DR   WPI; 2004-081743/08.
XX
PT   New compounds, particularly antisense oligonucleotides targeted to a
PT   nucleic acid encoding HMG-CoA reductase, useful for treating
PT   atherosclerosis, or a disease involving cholesterol metabolism or
PT   angiogenesis.
XX
PS   Example 16; SEQ ID NO 323; 110pp; English.
XX
CC   The invention relates to novel compounds of 8-80 nucleobases in length
CC   targeted to, and which specifically hybridises with, a nucleic acid
CC   molecule encoding 3-hydroxy-3-methylglutaryl-Coenzyme A (HMG-CoA)
CC   reductase, and inhibits the expression of HMG-CoA reductase. The novel
CC   compounds have cardiant, antiarteriosclerotic, and antilipaemic
CC   activities. The compound can be used to treat disorders by antisense gene
CC   therapy. The compounds, compositions and methods are useful for treating
CC   a disease or condition associated with HMG-CoA reductase, such as a
CC   cardiovascular disorder e.g. atherosclerosis, or a disease or condition
CC   involving cholesterol metabolism. They are also useful in research and
CC   diagnostics for modulating the expression of HMG-CoA reductase. This
CC   polynucleotide sequence represents an antisense oligonucleotide of the
CC   invention.
XX
SQ   Sequence 20 BP; 7 A; 2 C; 6 G; 5 T; 0 U; 0 Other;

  Query Match             1.9%;  Score 16.4;  DB 1;  Length 20;
  Best Local Similarity   94.4%;  Pred. No. 1.2e+02;
  Matches   17;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        807 TCATTCAAGCCTGTGAAT 824
              ||||||||||||||| |||
Db         18 TCATTCAAGCCTGTCAAT 1


RESULT 147
ADI79603
ID   ADI79603 standard; DNA; 20 BP.
XX
AC   ADI79603;
XX
DT   22-APR-2004  (first entry)
XX
DE   Human HMG-CoA reductase antisense oligonucleotide, SEQ ID No 126.
XX
KW   HMG-CoA reductase; 3-hydroxy-3-methylglutaryl-Coenzyme A;
KW   HMG-CoA reductase; cardiant; antiarteriosclerotic; antilipaemic;
KW   antisense gene therapy; cardiovascular disorder; cholesterol metabolism;
KW   human; ss.
XX
OS   Homo sapiens.
XX
PN   US2004006031-A1.
XX
PD   08-JAN-2004.
XX
PF   02-JUL-2002; 2002US-00190366.
XX
PR   02-JUL-2002; 2002US-00190366.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Dean NM,  Freier SM,  Dobie KW;
XX
DR   WPI; 2004-081743/08.
XX
PT   New compounds, particularly antisense oligonucleotides targeted to a
PT   nucleic acid encoding HMG-CoA reductase, useful for treating
PT   atherosclerosis, or a disease involving cholesterol metabolism or
PT   angiogenesis.
XX
PS   Example 15; SEQ ID NO 126; 110pp; English.
XX
CC   The invention relates to novel compounds of 8-80 nucleobases in length
CC   targeted to, and which specifically hybridises with, a nucleic acid
CC   molecule encoding 3-hydroxy-3-methylglutaryl-Coenzyme A (HMG-CoA)
CC   reductase, and inhibits the expression of HMG-CoA reductase. The novel
CC   compounds have cardiant, antiarteriosclerotic, and antilipaemic
CC   activities. The compound can be used to treat disorders by antisense gene
CC   therapy. The compounds, compositions and methods are useful for treating
CC   a disease or condition associated with HMG-CoA reductase, such as a
CC   cardiovascular disorder e.g. atherosclerosis, or a disease or condition
CC   involving cholesterol metabolism. They are also useful in research and
CC   diagnostics for modulating the expression of HMG-CoA reductase. This
CC   polynucleotide sequence represents an antisense oligonucleotide of the
CC   invention.
XX
SQ   Sequence 20 BP; 5 A; 6 C; 2 G; 7 T; 0 U; 0 Other;

  Query Match             1.9%;  Score 16.4;  DB 1;  Length 20;
  Best Local Similarity   94.4%;  Pred. No. 1.2e+02;
  Matches   17;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        807 TCATTCAAGCCTGTGAAT 824
              ||||||||||||||| |||
Db          3 TCATTCAAGCCTGTCAAT 20


RESULT 148
AAF91027/c
ID   AAF91027 standard; DNA; 17 BP.
XX
AC   AAF91027;
XX
DT   04-MAY-2001  (first entry)
XX
DE   Human multi drug resistance-1 gene related sequence SEQ ID NO: 114.
XX
KW   Human; MDR-1; multi drug resistance-1; drug uptake; disease; cancer;
KW   inflammatory disease; neuronal disease; CNS disease;
KW   cardiovascular disease; PCR primer; ss.
XX
OS   Homo sapiens.
XX
PN   WO200109183-A2.
XX
PD   08-FEB-2001.
XX
PF   28-JUL-2000; 2000WO-EP007314.
XX
PR   30-JUL-1999;   99EP-00114938.
PR   22-FEB-2000; 2000EP-00103361.
XX
PA   (EPID-) EPIDAUROS BIOTECHNOLOGIE AG.
XX
```

```
PI   Brinkmann U,  Hoffmeyer S,  Eichelbaum M,  Roots I;
XX
DR   WPI; 2001-159855/16.
XX
PT   New polynucleotide encoding a molecular variant Multi Drug Resistance
PT   (MDR)-1 polypeptide is useful for diagnosing and treating diseases
PT   associated with abnormal MDR-1 expression or function, e.g. cancer.
XX
PS   Claim 36; Page 100; 154pp; English.
XX
CC   The present invention provides nucleotides encoding molecular variants of
CC   the human multi drug resistance-1 (MDR-1) protein. These can be used to
CC   identify compounds capable of treating multidrug resistance and
CC   sensitivity interfering resulting from polymorphisms in MDR-1, which can
CC   lead to difficulties in treating cancer, cardiovascular, neuronal,
CC   inflammatory and CNS diseases
XX
SQ   Sequence 17 BP; 5 A; 5 C; 3 G; 4 T; 0 U; 0 Other;

  Query Match             1.8%;  Score 16;  DB 1;  Length 17;
  Best Local Similarity   100.0%;  Pred. No. 1.1e+02;
  Matches   16;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        321 GCAATGTGACTGCTGA 336
              ||||||||||||||||
Db         16 GCAATGTGACTGCTGA 1


RESULT 149
ADI50808
ID   ADI50808 standard; DNA; 17 BP.
XX
AC   ADI50808;
XX
DT   15-APR-2004  (first entry)
XX
DE   Human tumour suppression/reversion-related DNA sequence SeqID3311.
XX
KW   tumour suppression; tumour reversion; apoptosis; virus resistance;
KW   cytostatic; virucide; neuroprotective; nootropic; neuroleptic; probe;
KW   primer; PCR; gene chip; antisense; viral disease; tumour;
KW   cell degeneration; cancer; Alzheimer's disease; schizophrenia; ds; human.
XX
OS   Homo sapiens.
XX
PN   WO2003025177-A2.
XX
PD   27-MAR-2003.
XX
PF   17-SEP-2002; 2002WO-IB004523.
XX
PR   17-SEP-2001; 2001FR-00011980.
XX
PA   (MOLE-) MOLECULAR ENGINES LAB.
XX
PI   Telerman A,  Amson R,  Tuijnder M;
XX
DR   WPI; 2003-313354/30.
XX
PT   New isolated nucleic acid, useful for treating viral diseases associated
PT   with tumors and cell degeneration, also related polypeptides, antibodies
PT   and transfected cells.
XX
PS   Disclosure; SEQ ID NO 3311; 30pp; French.
XX
CC   This invention relates to novel isolated nucleic acid sequences involved
CC   in the phenomena of tumour suppression, tumour reversion, apoptosis
CC   and/or resistance to viruses. The invention may be useful for the
CC   development of compounds with a cytostatic, virucide, neuroprotective,
CC   nootropic or neuroleptic activity. The DNA sequences may be useful as
CC   probes and primers for detecting, indentifying, quantifying and/or
CC   amplifying nucleic acid, for example as one component of a gene chip, in
CC   vitro as antisense reagents and for production of recombinant
CC   polypeptides. The invention may therefore be useful for preparation of
CC   pharmaceuticals for prevention and/or treatment of viral diseases that
CC   are characterised by development of tumours or cell degeneration,
CC   specifically cancer but also Alzheimer's disease and schizophrenia. The
CC   present sequence is that of a nucleic acid sequence of the invention.
CC   Note: The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format directly from WIPO
CC   at ftp.wipo.int/pub/publishedpct_sequences
XX
SQ   Sequence 17 BP; 8 A; 5 C; 2 G; 2 T; 0 U; 0 Other;

  Query Match             1.8%;  Score 16;  DB 1;  Length 17;
  Best Local Similarity   100.0%;  Pred. No. 1.1e+02;
  Matches   16;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        517 GATCGCCCAATAAACA 532
              ||||||||||||||||
Db          1 GATCGCCCAATAAACA 16


RESULT 150
ADI50799
ID   ADI50799 standard; DNA; 17 BP.
XX
AC   ADI50799;
XX
DT   15-APR-2004  (first entry)
XX
DE   Human tumour suppression/reversion-related DNA sequence SeqID3302.
XX
KW   tumour suppression; tumour reversion; apoptosis; virus resistance;
KW   cytostatic; virucide; neuroprotective; nootropic; neuroleptic; probe;
KW   primer; PCR; gene chip; antisense; viral disease; tumour;
KW   cell degeneration; cancer; Alzheimer's disease; schizophrenia; ds; human.
XX
OS   Homo sapiens.
XX
PN   WO2003025177-A2.
XX
PD   27-MAR-2003.
XX
PF   17-SEP-2002; 2002WO-IB004523.
XX
PR   17-SEP-2001; 2001FR-00011980.
XX
PA   (MOLE-) MOLECULAR ENGINES LAB.
XX
PI   Telerman A,  Amson R,  Tuijnder M;
XX
DR   WPI; 2003-313354/30.
XX
PT   New isolated nucleic acid, useful for treating viral diseases associated
PT   with tumors and cell degeneration, also related polypeptides, antibodies
PT   and transfected cells.
XX
PS   Disclosure; SEQ ID NO 3302; 30pp; French.
XX
CC   This invention relates to novel isolated nucleic acid sequences involved
CC   in the phenomena of tumour suppression, tumour reversion, apoptosis
CC   and/or resistance to viruses. The invention may be useful for the
CC   development of compounds with a cytostatic, virucide, neuroprotective,
CC   nootropic or neuroleptic activity. The DNA sequences may be useful as
CC   probes and primers for detecting, indentifying, quantifying and/or
CC   amplifying nucleic acid, for example as one component of a gene chip, in
CC   vitro as antisense reagents and for production of recombinant
CC   polypeptides. The invention may therefore be useful for preparation of
CC   pharmaceuticals for prevention and/or treatment of viral diseases that
CC   are characterised by development of tumours or cell degeneration,
CC   specifically cancer but also Alzheimer's disease and schizophrenia. The
CC   present sequence is that of a nucleic acid sequence of the invention.
CC   Note: The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format directly from WIPO
CC   at ftp.wipo.int/pub/publishedpct_sequences
```

```
XX
SQ   Sequence 17 BP; 5 A; 2 C; 5 G; 5 T; 0 U; 0 Other;

  Query Match             1.8%;  Score 16;  DB 1;  Length 17;
  Best Local Similarity   100.0%;  Pred. No. 1.1e+02;
  Matches   16;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        690 GATCACTTGGAAGATT 705
              ||||||||||||||||
Db          1 GATCACTTGGAAGATT 16


RESULT 151
ABK41012/c
ID   ABK41012 standard; DNA; 18 BP.
XX
AC   ABK41012;
XX
DT   21-MAY-2002  (first entry)
XX
DE   Human obesity-associated biallelic marker upstream PCR primer #89.
XX
KW   Human; obesity associated-biallelic marker; chromosome 10; obesity; ss;
KW   drug response; hyperuricaemia; digestive pathology; hypertension; cancer;
KW   hepatic function disorder; cardiovascular disease; hyperlipidaemia; PCR;
KW   insulin disorder; atheromatous disease; cardiac insufficiency; primer.
XX
OS   Homo sapiens.
XX
PN   WO200206525-A2.
XX
PD   24-JAN-2002.
XX
PF   28-JUN-2001; 2001WO-IB001477.
XX
PR   18-JUL-2000; 2000US-0219704P.
XX
PA   (GEST ) GENSET.
XX
PI   Cohen D,  Blumenfeld M,  Chumakov I,  Abderrahim H,  Bihain B;
XX
DR   WPI; 2002-155043/20.
XX
PT   Set of novel map-related biallelic markers, preferably located on obesity
PT   disorder-associated chromosomal regions on chromosomes 3, 10 and 19,
PT   useful, for e.g. detecting statistical correlations between marker allele
PT   and a phenotype.
XX
PS   Example 2; Page 246; 311pp; English.
XX
CC   The invention relates to a set of novel map-related biallelic markers,
CC   preferably located on obesity disorder-associated chromosomal regions on
CC   chromosomes 3, 10 and 19. The markers are useful for genotyping or
CC   estimating the frequency of an allele in a population, for detecting an
CC   association between a genotype or haplotype and a phenotype, e.g. a
CC   disease involving drug responses, obesity or disorders related to
CC   obesity, such as hyperuricaemia, digestive pathology, hepatic function
CC   disorders, cancer, cardiovascular disease, hypertension, hyperlipidaemia,
CC   insulin disorders, atheromatous disease and cardiac insufficiency. The
CC   markers are useful for detecting a statistical correlation between a
CC   biallelic marker allele and a phenotype and/or between a biallelic marker
CC   haplotype and a phenotype. This sequence represents a PCR primer used to
CC   amplify a human obesity-associated biallelic marker
XX
SQ   Sequence 18 BP; 3 A; 10 C; 0 G; 5 T; 0 U; 0 Other;

  Query Match             1.8%;  Score 16;  DB 1;  Length 18;
  Best Local Similarity   100.0%;  Pred. No. 1.2e+02;
  Matches   16;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        153 TGAAGGTGTGGGGAAG 168
              ||||||||||||||||
Db         16 TGAAGGTGTGGGGAAG 1


RESULT 152
AAL50752
ID   AAL50752 standard; DNA; 19 BP.
XX
AC   AAL50752;
XX
DT   15-JAN-2004  (first entry)
XX
DE   PAL/alpha-tubulin-related unpredictable PCR (UP-PCR) primer #13.
XX
KW   PAL promoter; transgenic plant; protein expression; UP-PCR; primer;
KW   alpha-tubulin promoter; ss.
XX
OS   Unidentified.
XX
PN   US6441273-B1.
XX
PD   27-AUG-2002.
XX
PF   07-APR-2000; 2000US-00545686.
XX
PR   08-FEB-2000; 2000US-0184934P.
XX
PA   (CORR ) CORNELL RES FOUND INC.
XX
PI   Aldwinckle HS,  Gaitan AL;
XX
DR   WPI; 2002-711537/77.
XX
PT   A novel DNA promoter, preferably a phenylalanine ammonia lyase promoter,
PT   useful for making a transgenic plant, induces expression of protein
PT   encoded by a second DNA operably associated with a DNA promoter.
XX
PS   Example 11; Col 28; 48pp; English.
XX
CC   The invention comprises the PAL promoter sequence isolated from Coffea
CC   arabica (coffee) which is capable of inducing the expression of a protein
CC   that it is operably associated with. The promoter sequence of the
CC   invention is useful in the production of a transgenic plant and in
CC   directing protein expression in plants. The present DNA sequence
CC   represents a primer that was used in an unpredictable-PCR (UP-PCR)
CC   protocol in an example of the invention
XX
SQ   Sequence 19 BP; 3 A; 4 C; 4 G; 6 T; 0 U; 2 Other;

  Query Match             1.8%;  Score 16;  DB 1;  Length 19;
  Best Local Similarity   88.9%;  Pred. No. 1.2e+02;
  Matches   16;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        195 ATGGATTCCATGTTCATG 212
              |||| |||||||| ||||
Db          1 ATGGNTTCCATGTNCATG 18


RESULT 153
ADM83390
ID   ADM83390 standard; DNA; 19 BP.
XX
AC   ADM83390;
XX
DT   03-JUN-2004  (first entry)
XX
DE   Coffea arabica PAL gene gene-walking PCR primer 13.
XX
KW   Promoter; alpha-tubulin promoter; phenylalanine ammonia lyase promoter;
KW   PAL; protein expression; pathogen resistant cultivar; coffee; PCR;
KW   primer; ss.
XX
OS   Coffea arabica.
XX
PN   US2003163837-A1.
```

XX
PD 28-AUG-2003.
XX
PF 16-JUL-2002; 2002US-00197280.
XX
PR 08-FEB-2000; 2000US-0180934P.
PR 07-APR-2000; 2000US-00545686.
XX
PA (ALDW/) ALDWINCKLE H S.
PA (GAIT/) GAITAN A L.
XX
PI Aldwinckle HS, Gaitan AL;
XX
DR WPI; 2003-897980/82.
XX
PT New DNA promoter for inducing expression of a protein encoded by a second
PT DNA operably associated with the DNA promoter isolated from coffee,
PT useful for directing protein expression in plants.
XX
PS Example 11; SEQ ID NO 27; 50pp; English.
XX
CC The present invention relates to the isolation of two DNA promoters
CC (alpha-tubulin and phenylalanine ammonia lyase) from a coffee plant
CC capable of inducing the expression of a second DNA operably linked to the
CC promoter. The invention is useful for directing protein expression in
CC plants. The invention is also useful for the development of pathogen
CC resistant cultivars of coffee, improve other characteristics of coffee
CC plants such as hardiness, production and cup quality and overcoming the
CC deficiencies of the methods for fighting disease in the coffee plant. The
CC present sequence is coffea arabica PAL gene gene-walking PCR primer. The
CC primer is used in the exemplification of the invention.
XX
SQ Sequence 19 BP; 3 A; 4 C; 4 G; 6 T; 0 U; 2 Other;

Query Match 1.8%; Score 16; DB 1; Length 19;
Best Local Similarity 88.9%; Pred. No. 1.2e+02;
Matches 16; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 195 ATGGATTCCATGTTCATG 212
|||| |||||||| ||||
Db 1 ATGGNTTCCATGTNCATG 18

RESULT 154
ACF62527
ID ACF62527 standard; DNA; 17 BP.
XX
AC ACF62527;
XX
DT 08-OCT-2003 (first entry)
XX
DE Cancer based on CYP3A5 related oligonucleotide SEQ ID NO:356.
XX
KW Cancer; CYP3A5; irinotecan; pharmaceutical; malignant glioma;
KW cytochrome p450; subfamily IIIA; nifedipine oxidase; polypeptide 5;
KW cytostatic; PCR primer; ss.
XX
OS Synthetic.
XX
PN WO2003013534-A2.
XX
PD 20-FEB-2003.
XX
PF 23-JUL-2002; 2002WO-EP008219.
XX
PR 23-JUL-2001; 2001EP-00117608.
PR 24-MAY-2002; 2002EP-00011710.
XX
PA (EPID-) EPIDAUROS BIOTECHNOLOGIE AG.
XX
PI Heinrich G, Kerb R;
XX
DR WPI; 2003-268144/26.
XX
PT New use of irinotecan for preparation of compositions for treating cancer
PT in subject having genome with variant allele comprising cytochrome p450,
PT subfamily IIIA, polypeptide 5 polynucleotide, termed CYP3A5.
XX
PS Disclosure; Page 42; 86pp; English.
XX
CC The present invention describes the use of irinotecan (I) or its
CC derivative for the preparation of a pharmaceutical composition for
CC treating colorectal, cervical, gastric, lung, ovarian or pancreatic
CC cancer, or malignant glioma in a subject having a genome with a variant
CC allele which comprises a cytochrome p450, subfamily IIIA (nifedipine
CC oxidase), polypeptide 5 (CYP3A5) polynucleotide (II). (I) and (II) have
CC cytostatic activity. The therapeutic applications of (I) is improved,
CC since it is possible to individually treat a subject with an appropriate
CC dosage and/or an appropriate derivative of (I). Therefore, undesirable,
CC harmful or toxic effects are efficiently avoided. Unnecessary and
CC potentially harmful treatment of those subjects who do not respond to the
CC treatment with substances (nonresponders), as well as the development of
CC drug resistances due to suboptimal drug dosing can be avoided. ACF62200
CC to ACF62751 and ABM34912 to ABM35013 represent sequences used in the
CC exemplification of the present invention
XX
SQ Sequence 17 BP; 4 A; 3 C; 4 G; 5 T; 0 U; 1 Other;

Query Match 1.8%; Score 15.6; DB 1; Length 17;
Best Local Similarity 93.8%; Pred. No. 1.2e+02;
Matches 15; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

Qy 321 GCAATGTGACTGCTGA 336
|||||||:||||||||
Db 2 GCAATGTRACTGCTGA 17

RESULT 155
ADB21198
ID ADB21198 standard; DNA; 17 BP.
XX
AC ADB21198;
XX
DT 20-NOV-2003 (first entry)
XX
DE MRP1 based cancer related nucleic acid SEQ ID NO:356.
XX
KW irinotecan; colorectal cancer; cervical cancer; gastric cancer;
KW lung cancer; ovarian cancer; pancreatic cancer; malignant glioma;
KW variant allele; multidrug resistance protein 1; MRP1; cytostatic; gene;
KW ds.
XX
OS Unidentified.
XX
PN WO2003013533-A2.
XX
PD 20-FEB-2003.
XX
PF 23-JUL-2002; 2002WO-EP008200.
XX
PR 23-JUL-2001; 2001EP-00117608.
PR 24-MAY-2002; 2002EP-00011710.
XX
PA (EPID-) EPIDAUROS BIOTECHNOLOGIE AG.
XX
PI Heinrich G, Kerb R;
XX
DR WPI; 2003-354397/33.
XX
PT Use of irinotecan or its derivative for preparation of a pharmaceutical
PT composition for treating cancer in a subject having a genome with a
PT variant allele comprising a multidrug resistance protein 1
PT polynucleotide.
XX
PS Disclosure; Page 51; 100pp; English.
XX

CC The present invention describes a method for the use of irinotecan (I) or
CC its derivative for the preparation of a pharmaceutical composition for
CC treating colorectal, cervical, gastric, lung, ovarian or pancreatic
CC cancer, or malignant glioma in a subject having a genome with a variant
CC allele which comprises a multidrug resistance protein 1 (MRP1)
CC polynucleotide (II). (I) has cytostatic activity. (I) or its derivative
CC can be used for the preparation of a pharmaceutical composition for
CC treating colorectal, cervical, gastric, lung, ovarian or pancreatic
CC cancer, or malignant glioma in a subject, where the subject is a human
CC (preferably African or Asian) or a mouse. The present sequence represents
CC a sequence which is used in the exemplification of the present invention.
XX
SQ Sequence 17 BP; 4 A; 3 C; 4 G; 5 T; 0 U; 1 Other;

Query Match 1.8%; Score 15.6; DB 1; Length 17;
Best Local Similarity 93.8%; Pred. No. 1.2e+02;
Matches 15; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

Qy 321 GCAATGTGACTGCTGA 336
||||||:||||||||
Db 2 GCAATGTRACTGCTGA 17

RESULT 156
ADB88287
ID ADB88287 standard; DNA; 17 BP.
XX
AC ADB88287;
XX
DT 04-DEC-2003 (first entry)
XX
DE Human UGT1A1 variant allele sequence fragment SEQ ID NO:328.
XX
KW ss; irinotecan; cancer; UGT1A1; cytostatic; topoisomerase I inhibitor;
KW colorectal cancer; cervical cancer; gastric cancer; lung cancer;
KW ovarian cancer; pancreatic cancer; malignant glioma;
KW uridine diphosphate glycosyltransferase1 member A1.
XX
OS Homo sapiens.
XX
PN WO2003013536-A2.
XX
PD 20-FEB-2003.
XX
PF 23-JUL-2002; 2002WO-EP008217.
XX
PR 23-JUL-2001; 2001EP-00117608.
PR 24-MAY-2002; 2002EP-00011710.
XX
PA (EPID-) EPIDAUROS BIOTECHNOLOGIE AG.
XX
PI Heinrich G, Kerb R;
XX
DR WPI; 2003-289896/28.
XX
PT Use of irinotecan to treat cancer patient by determining if patient has
PT variant alleles of UGT1A1 gene, administering increased/decreased amounts
PT of irinotecan based on increased/decreased levels of UGT1A1 gene product.
XX
PS Disclosure; Page 55; 107pp; English.
XX
CC The invention relates to the novel use of irinotecan to treat a patient
CC suffering from cancer. This involves determining if the patient has one
CC or more variant alleles of the UGT1A1 gene, and if the patient has one or
CC more of such variant alleles, irinotecan is administered in an increased
CC or decreased amount in comparison to the amount that is administered
CC without regard to the patient's alleles in the UGT1A1 gene. The invention
CC has cytostatic activity. A composition of the invention acts as a
CC topoisomerase I inhibitor. The method is useful for treating a patient,
CC an animal e.g. mouse or a human, preferably African or Asian, suffering
CC from cancer such as colorectal, cervical, gastric cancer, lung, ovarian,
CC pancreatic cancer or malignant glioma. The present sequence is udes in
CC the exemplification of the invention.
XX
SQ Sequence 17 BP; 4 A; 3 C; 4 G; 5 T; 0 U; 1 Other;

Query Match 1.8%; Score 15.6; DB 1; Length 17;
Best Local Similarity 93.8%; Pred. No. 1.2e+02;
Matches 15; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

Qy 321 GCAATGTGACTGCTGA 336
||||||:||||||||
Db 2 GCAATGTRACTGCTGA 17

RESULT 157
ADB97270
ID ADB97270 standard; DNA; 17 BP.
XX
AC ADB97270;
XX
DT 04-DEC-2003 (first entry)
XX
DE Human MDR1 variant allele sequence fragment SEQ ID NO:356.
XX
KW irinotecan; colorectal cancer; cervical cancer; gastric cancer;
KW lung cancer; ovarian cancer; pancreatic cancer; malignant glioma;
KW multidrug resistance 1; MDR1; cytostatic; human; ds; Cyp3A5; MRP1; MDR1;
KW TOP1.
XX
OS Homo sapiens.
XX
PN WO2003013537-A2.
XX
PD 20-FEB-2003.
XX
PF 23-JUL-2002; 2002WO-EP008218.
XX
PR 23-JUL-2001; 2001EP-00117608.
PR 24-MAY-2002; 2002EP-00011710.
XX
PA (EPID-) EPIDAUROS BIOTECHNOLOGIE AG.
XX
PI Heinrich G, Kerb R;
XX
DR WPI; 2003-268145/26.
XX
PT New use of irinotecan for preparation of pharmaceutical compositions for
PT treating cancer in subject having genome with variant allele comprising
PT multidrug resistance 1 polynucleotide.
XX
PS Disclosure; Page 79; 130pp; English.
XX
CC The invention relates to the novel use of irinotecan or its derivative
CC for the preparation of pharmaceutical compositions for treating
CC colorectal, cervical, gastric, lung, ovarian or pancreatic cancer, or
CC malignant glioma in a subject having a genome with a variant allele which
CC comprises a multidrug resistance 1 (MDR1) polynucleotide. A composition
CC of the invention has cytostatic activity. The invention is useful for the
CC preparation of pharmaceutical compositions for treating colorectal,
CC cervical, gastric, lung, ovarian or pancreatic cancer, or malignant
CC glioma in a subject (preferably human, more preferably African or Asian)
CC or a mouse. The present sequence is used in the exemplification of the
CC invention.
XX
SQ Sequence 17 BP; 4 A; 3 C; 4 G; 5 T; 0 U; 1 Other;

Query Match 1.8%; Score 15.6; DB 1; Length 17;
Best Local Similarity 93.8%; Pred. No. 1.2e+02;
Matches 15; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

Qy 321 GCAATGTGACTGCTGA 336
||||||:||||||||
Db 2 GCAATGTRACTGCTGA 17

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RESULT 158
ADB92461
ID   ADB92461 standard; DNA; 17 BP.
XX
AC   ADB92461;
XX
DT   04-DEC-2003  (first entry)
XX
DE   Human MDR1 variant allele sequence fragment SEQ ID NO:356.
XX
KW   irinotecan; colorectal cancer; cervical cancer; gastric cancer;
KW   lung cancer; ovarian cancer; pancreatic cancer; malignant glioma;
KW   multidrug resistance 1; MDR1; cytostatic; ds; human; UGT1A1; MRP1; TOP1.
XX
OS   Homo sapiens.
XX
PN   WO2003013535-A2.
XX
PD   20-FEB-2003.
XX
PF   23-JUL-2002; 2002WO-EP008220.
XX
PR   23-JUL-2001; 2001EP-00117608.
PR   24-MAY-2002; 2002EP-00011710.
XX
PA   (EPID-) EPIDAUROS BIOTECHNOLOGIE AG.
XX
PI   Heinrich G,  Kerb R;
XX
DR   WPI; 2003-342400/32.
XX
PT   New use of irinotecan for preparation of pharmaceutical compositions for
PT   treating cancer in subject having genome with variant allele comprising
PT   multidrug resistance 1 polynucleotide.
XX
PS   Disclosure; Page 50; 104pp; English.
XX
CC   The invention relates ro a novel use of irinotecan or its derivative for
CC   the preparation of a pharmaceutical composition for treating colorectal,
CC   cervical, gastric, lung, ovarian or pancreatic cancer, or malignant
CC   glioma in a subject having a genome with a variant allele which comprises
CC   a multidrug resistance 1 (MDR1) polynucleotide. A composition of the
CC   invention has cytostatic activity. The present sequence is used in the
CC   exemplification of the invention.
XX
SQ   Sequence 17 BP; 4 A; 3 C; 4 G; 5 T; 0 U; 1 Other;

  Query Match             1.8%;  Score 15.6;  DB 1;  Length 17;
  Best Local Similarity   93.8%;  Pred. No. 1.2e+02;
  Matches   15;  Conservative    1;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        321 GCAATGTGACTGCTGA 336
              |||||||:||||||||
Db          2 GCAATGTRACTGCTGA 17


RESULT 159
AAF03382/c
ID   AAF03382 standard; DNA; 17 BP.
XX
AC   AAF03382;
XX
DT   16-FEB-2001  (first entry)
XX
DE   Hammerhead ribozyme substrate #1677.
XX
KW   Ribozyme; erythropoietin; granulocyte colony stimulating factor;
KW   interferon alpha; ss.
XX
OS   Homo sapiens.
XX
PN   WO200061729-A2.
XX
PD   19-OCT-2000.
XX
PF   11-APR-2000; 2000WO-US009721.
XX
PR   12-APR-1999;   99US-0129390P.
XX
PA   (RIBO-) RIBOZYME PHARM INC.
XX
PI   Blatt L,  Zwick M,  Pavco P,  Mcswiggen J;
XX
DR   WPI; 2000-647423/62.
XX
PT   Enzymatic and antisense nucleic acid inhibition of repressor genes,.
PT   useful for producing e.g. granulocyte colony stimulating factor protein,
PT   interferon alpha and erythropoietin.
XX
PS   Claim 37; Page 94; 164pp; English.
XX
CC   The present invention relates to enzymatic and antisense nucleic acid
CC   molecules that act as inhibitors of the expression of repressor genes
CC   encoding the TR2 Orphan receptor, EAR3/COUP-TF-1, the GATA transcription
CC   factor gene, IRF-2 and/or the CAATT Displacement Protein (CDP).
CC   Inhibition of the repressors removes prevents inhibition (and
CC   consequently increases expression of) genes involved in the production of
CC   erythropoietin, granulocyte colony stimulating factor protein and
CC   interferon alpha
XX
SQ   Sequence 17 BP; 2 A; 3 C; 1 G; 11 T; 0 U; 0 Other;

  Query Match             1.8%;  Score 15.4;  DB 1;  Length 17;
  Best Local Similarity   94.1%;  Pred. No. 1.2e+02;
  Matches   16;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        459 ATGAAGAAAGTACAAAG 475
              |||||||||:|||||||
Db         17 ATGAAGAAAATACAAAG 1


RESULT 160
AAF03383/c
ID   AAF03383 standard; DNA; 17 BP.
XX
AC   AAF03383;
XX
DT   16-FEB-2001  (first entry)
XX
DE   Hammerhead ribozyme substrate #1678.
XX
KW   Ribozyme; erythropoietin; granulocyte colony stimulating factor;
KW   interferon alpha; ss.
XX
OS   Homo sapiens.
XX
PN   WO200061729-A2.
XX
PD   19-OCT-2000.
XX
PF   11-APR-2000; 2000WO-US009721.
XX
PR   12-APR-1999;   99US-0129390P.
XX
PA   (RIBO-) RIBOZYME PHARM INC.
XX
PI   Blatt L,  Zwick M,  Pavco P,  Mcswiggen J;
XX
DR   WPI; 2000-647423/62.
XX
PT   Enzymatic and antisense nucleic acid inhibition of repressor genes,
PT   useful for producing e.g. granulocyte colony stimulating factor protein,
PT   interferon alpha and erythropoietin.
XX
PS   Claim 37; Page 94; 164pp; English.
XX
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```
CC   The present invention relates to enzymatic and antisense nucleic acid
CC   molecules that act as inhibitors of the expression of repressor genes
CC   encoding the TR2 Orphan receptor, EAR3/COUP-TF-1, the GATA transcription
CC   factor gene, IRF-2 and/or the CAATT Displacement Protein (CDP).
CC   Inhibition of the repressors removes prevents inhibition (and
CC   consequently increases expression of) genes involved in the production of
CC   erythropoietin, granulocyte colony stimulating factor protein and
CC   interferon alpha
XX
SQ   Sequence 17 BP; 2 A; 2 C; 1 G; 12 T; 0 U; 0 Other;

  Query Match             1.8%;  Score 15.4;  DB 1;  Length 17;
  Best Local Similarity   94.1%;  Pred. No. 1.2e+02;
  Matches   16;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        458 AATGAAGAAAGTACAAA 474
              ||||||||||  ||||||
Db         17 AATGAAGAAAATACAAA 1


RESULT 161
AAN71205
ID   AAN71205 standard; cDNA; 15 BP.
XX
AC   AAN71205;
XX
DT   03-MAY-1991  (first entry)
XX
DE   Sequence of probe for human superoxidase dismutase (hSOD).
XX
KW   Enzyme; arthro-rheumatoid osteoarthritis; radiation-induced effects; ss.
XX
OS   Homo sapiens.
XX
PN   DE3628508-A.
XX
PD   12-MAR-1987.
XX
PF   22-AUG-1986;   86DE-03628508.
XX
PR   23-AUG-1985;   85JP-00185246.
PR   15-AUG-1986;   86JP-00191235.
XX
PA   (TOXN ) TOYO JOZO KK.
XX
PI   Sagai H,  Takahara M,  Katsuragi S,  Kajiwara J,  Masujima H;
XX
DR   WPI; 1987-073705/11.
XX
PT   New polypeptide analogues of human superoxidedismutase - and metal contg.
PT   dimers, useful e.g. for treating osteoarthritis.
XX
PS   Example; p5; 25pp; German.
XX
CC   cDNA encoding hSOD (AAN71204) is isolated using a 5-triplet probe
CC   (AAN71205). The cDNA is subjected to site-specific mutagenesis and
CC   expressed to produce hSOD analogues (AAP70930) which are claimed
XX
SQ   Sequence 15 BP; 4 A; 4 C; 6 G; 1 T; 0 U; 0 Other;

  Query Match             1.7%;  Score 15;  DB 1;  Length 15;
  Best Local Similarity   100.0%;  Pred. No. 1.2e+02;
  Matches   15;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy         65 ATGGCGACGAAGGCC 79
              |||||||||||||||
Db          1 ATGGCGACGAAGGCC 15


RESULT 162
AAQ61567
ID   AAQ61567 standard; DNA; 15 BP.
XX
AC   AAQ61567;
XX
DT   11-NOV-1994  (first entry)
XX
DE   Human SOD probe.
XX
KW   Human; porcine; super oxide dismutase; SOD; vector; hybrid; expression;
KW   ss.
XX
OS   Synthetic.
XX
PN   JP06054682-A.
XX
PD   01-MAR-1994.
XX
PF   06-AUG-1992;   92JP-00210435.
XX
PR   06-AUG-1992;   92JP-00210435.
XX
PA   (ASAH ) ASAHI CHEM IND CO LTD.
XX
DR   WPI; 1994-111907/14.
XX
PT   Recombinant prepn. of a polypeptide having super oxide dismutase activity
PT   - by culture of cell transformed with a vector contg. a hybrid human/pig
PT   SOD gene.
XX
PS   Disclosure; Page 8; 15pp; Japanese.
XX
CC   A hybrid gene of the human SOD gene and pig SOD gene was prepd. by
CC   replacing DNA encoding amino acids 107-113 of human SOD, with DNA
CC   encoding amino acids 106-112 of pig SOD. The gene was inserted into a
CC   vector of transformation into a cell, e.g. E. coli. The cell was cultured
CC   and the polypeptide collected
XX
SQ   Sequence 15 BP; 4 A; 4 C; 6 G; 1 T; 0 U; 0 Other;

  Query Match             1.7%;  Score 15;  DB 1;  Length 15;
  Best Local Similarity   100.0%;  Pred. No. 1.2e+02;
  Matches   15;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy         65 ATGGCGACGAAGGCC 79
              |||||||||||||||
Db          1 ATGGCGACGAAGGCC 15


RESULT 163
ADO43600
ID   ADO43600 standard; DNA; 15 BP.
XX
AC   ADO43600;
XX
DT   29-JUL-2004  (first entry)
XX
DE   Wild type DNA fragment of SOD-1 where G12R mutation occurs.
XX
KW   DNAzyme; dominantly inherited disorder; achondroplasia;
KW   amyotrophic lateral sclerosis; Marfan syndrome; hypercholesterolemia;
KW   osteogenesis imperfecta; SCCMS; ss; superoxide disutase; SOD-1.
XX
OS   Homo sapiens.
XX
PN   WO2004038019-A2.
XX
PD   06-MAY-2004.
XX
PF   23-OCT-2003; 2003WO-GB004614.
XX
PR   23-OCT-2002; 2002GB-00024663.
XX
PA   (ISIS-) ISIS INNOVATION LTD.
XX
PI   Beeson D,  Wood M,  Abdelgany A;
```

XX
DR WPI; 2004-365523/34.
XX
PT New DNAzyme that cleaves mutant polynucleotides, useful in treating a
PT dominantly inherited disorder associated with a mutant allele, such as
PT achondroplasia, amyotrophic lateral sclerosis, Marfan syndrome and
PT hypercholesterolemia.
XX
PS Disclosure; Page 7; 24pp; English.
XX
CC The specification describes a DNAzyme which selectively cleaves a mutant
CC polynucleotide by cleaving at a site remote from the mutation site. The
CC DNAzyme binds selectively to a mutant allele or its expressed product,
CC and comprises a central catalytic motif (Helix II) and two flanking
CC regions (helix I and III) where at least one of the flanking regions has
CC a polynucleotide sequence complementary to a region that includes the
CC mutation in the mutant allele or to that of the expressed product. Both
CC flanking regions are complementary to mutated regions of the mutant
CC allele or the expressed product. The complement of the mutation is 2 or 3
CC nucleotides upstream or downstream of the site of cleavage, preferably in
CC helix I. Helix I and III are of different lengths, where helix I is
CC shorter than helix III, and their length is 21-7 or 15-8 nucleotides.
CC Helix I preferably comprises 9 nucleotides and helix III 13 nucleotides.
CC At least one of the flanking regions comprises ribonucleic acid. The
CC DNAzyme further comprises a stem-loop structure at either or both
CC terminus. The DNAzyme is useful in therapy, in particular for the
CC manufacture of a medicament for the treatment of a disorder associated
CC with a mutant allele in a patient, where the DNAzyme comprises a central
CC catalytic motif and two flanking substrate-binding regions, and where at
CC least one flanking region binds at the site of mutation in the mutant
CC allele or its expressed product and the catalytic motif cleaves at a site
CC remote from the site of mutation. The disorder is a dominantly inherited
CC disorder, such as achondroplasia, amyotrophic lateral sclerosis with SOD1
CC mutation, Marfan syndrome, hypercholesterolemia, osteogenesis imperfecta
CC and SCCMS. ADO43600-ADO43601 represent the wild type and mutant DNA
CC fragments, respectively, of the Cu/Zn superoxide disutase (SOD-1) gene
CC where a G12R mutation occurs, and causes amyotrophic lateral sclerosis.
CC These sequences are suitable for the design of DNAzymes of the invention
CC (see ADO43602).
XX
SQ Sequence 15 BP; 2 A; 5 C; 7 G; 1 T; 0 U; 0 Other;

Query Match 1.7%; Score 15; DB 1; Length 15;
Best Local Similarity 100.0%; Pred. No. 1.2e+02;
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 95 GGCGACGGCCCAGTG 109
||||||||||||||||
Db 1 GGCGACGGCCCAGTG 15

RESULT 164
ADO43606
ID ADO43606 standard; DNA; 15 BP.
XX
AC ADO43606;
XX
DT 29-JUL-2004 (first entry)
XX
DE Wild type DNA fragment of SOD-1 where L26S mutation occurs.
XX
KW DNAzyme; dominantly inherited disorder; achondroplasia;
KW amyotrophic lateral sclerosis; Marfan syndrome; hypercholesterolemia;
KW osteogenesis imperfecta; SCCMS; ss; superoxide disutase; SOD-1.
XX
OS Homo sapiens.
XX
PN WO2004038019-A2.
XX
PD 06-MAY-2004.
XX
PF 23-OCT-2003; 2003WO-GB004614.
XX
PR 23-OCT-2002; 2002GB-00024663.
XX
PA (ISIS-) ISIS INNOVATION LTD.
XX
PI Beeson D, Wood M, Abdelgany A;
XX
DR WPI; 2004-365523/34.
XX
PT New DNAzyme that cleaves mutant polynucleotides, useful in treating a
PT dominantly inherited disorder associated with a mutant allele, such as
PT achondroplasia, amyotrophic lateral sclerosis, Marfan syndrome and
PT hypercholesterolemia.
XX
PS Disclosure; Page 8; 24pp; English.
XX
CC The specification describes a DNAzyme which selectively cleaves a mutant
CC polynucleotide by cleaving at a site remote from the mutation site. The
CC DNAzyme binds selectively to a mutant allele or its expressed product,
CC and comprises a central catalytic motif (Helix II) and two flanking
CC regions (helix I and III) where at least one of the flanking regions has
CC a polynucleotide sequence complementary to a region that includes the
CC mutation in the mutant allele or to that of the expressed product. Both
CC flanking regions are complementary to mutated regions of the mutant
CC allele or the expressed product. The complement of the mutation is 2 or 3
CC nucleotides upstream or downstream of the site of cleavage, preferably in
CC helix I. Helix I and III are of different lengths, where helix I is
CC shorter than helix III, and their length is 21-7 or 15-8 nucleotides.
CC Helix I preferably comprises 9 nucleotides and helix III 13 nucleotides.
CC At least one of the flanking regions comprises ribonucleic acid. The
CC DNAzyme further comprises a stem-loop structure at either or both
CC terminus. The DNAzyme is useful in therapy, in particular for the
CC manufacture of a medicament for the treatment of a disorder associated
CC with a mutant allele in a patient, where the DNAzyme comprises a central
CC catalytic motif and two flanking substrate-binding regions, and where at
CC least one flanking region binds at the site of mutation in the mutant
CC allele or its expressed product and the catalytic motif cleaves at a site
CC remote from the site of mutation. The disorder is a dominantly inherited
CC disorder, such as achondroplasia, amyotrophic lateral sclerosis with SOD1
CC mutation, Marfan syndrome, hypercholesterolemia, osteogenesis imperfecta
CC and SCCMS. ADO43606-ADO43607 represent the wild type and mutant DNA
CC fragments, respectively, of the Cu/Zn superoxide disutase (SOD-1) gene
CC where a L26S mutation occurs, and causes amyotrophic lateral sclerosis.
CC These sequences are suitable for the design of DNAzymes of the invention
CC (see ADO43608).
XX
SQ Sequence 15 BP; 5 A; 2 C; 5 G; 3 T; 0 U; 0 Other;

Query Match 1.7%; Score 15; DB 1; Length 15;
Best Local Similarity 100.0%; Pred. No. 1.2e+02;
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 437 GATGACTTGGGCAAA 451
||||||||||||||||
Db 1 GATGACTTGGGCAAA 15

RESULT 165
AAH21294
ID AAH21294 standard; DNA; 17 BP.
XX
AC AAH21294;
XX
DT 13-SEP-2001 (first entry)
XX
DE Human MDR-1 allele ex12/+44 counterstrain.
XX
KW MDR-1; human; multidrug resistance gene; genotyping; SNP; screening;
KW single nucleotide polymorphism; ds.
XX
OS Homo sapiens.
XX
PN DE19963490-A1.
XX

PD 05-JUL-2001.
XX
PF 28-DEC-1999; 99DE-01063490.
XX
PR 28-DEC-1999; 99DE-01063490.
XX
PA (EPID-) EPIDAUROS BIOTECHNOLOGIE AG.
XX
PI Kostrzewa M, Hoffmeyer S, Brinkmann U;
XX
DR WPI; 2001-426633/46.
XX
PT Genotyping multidrug resistance gene-1, useful for assessing doses of
PT pharmaceuticals, by mass spectrometric analysis of primer extension
PT products.
XX
PS Disclosure; Page 11; 22pp; German.
XX
CC This invention describes a novel method for genotyping the human MDR-1
CC (multidrug resistance-1) gene by mass spectrometric detection of the
CC mutational status at some or all of 16 point mutations (single nucleotide
CC polymorphism; SNPs). Genotyping the MDR-1 gene may indicate altered
CC expression or function of the encoded protein (which regulates the
CC transport of compounds, including drugs, across cell membranes), and thus
CC may indicate that changes in drug dosage are required. The method is
CC rapid, valid and inexpensive, and provides a high throughput screen with
CC only a few genotypic characteristics expected. Particularly mass analysis
CC takes only 4 seconds, so a four-fold multiplex reaction will allow all
CC positions to be determined in about 16 sec
XX
SQ Sequence 17 BP; 3 A; 3 C; 5 G; 5 T; 0 U; 1 Other;

Query Match 1.7%; Score 15; DB 1; Length 17;
Best Local Similarity 88.2%; Pred. No. 1.3e+02;
Matches 15; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

Qy 319 GGGCAATGTGACTGCTG 335
| ||||||:|||||||
Db 1 GTGCAATGTRACTGCTG 17

RESULT 166
AAH21293/c
ID AAH21293 standard; DNA; 17 BP.
XX
AC AAH21293;
XX
DT 13-SEP-2001 (first entry)
XX
DE Human MDR-1 allele ex12/+44.
XX
KW MDR-1; human; multidrug resistance gene; genotyping; SNP; screening;
KW single nucleotide polymorphism; ds.
XX
OS Homo sapiens.
XX
PN DE19963490-A1.
XX
PD 05-JUL-2001.
XX
PF 28-DEC-1999; 99DE-01063490.
XX
PR 28-DEC-1999; 99DE-01063490.
XX
PA (EPID-) EPIDAUROS BIOTECHNOLOGIE AG.
XX
PI Kostrzewa M, Hoffmeyer S, Brinkmann U;
XX
DR WPI; 2001-426633/46.
XX
PT Genotyping multidrug resistance gene-1, useful for assessing doses of
PT pharmaceuticals, by mass spectrometric analysis of primer extension
PT products.
XX
PS Disclosure; Page 11; 22pp; German.
XX
CC This invention describes a novel method for genotyping the human MDR-1
CC (multidrug resistance-1) gene by mass spectrometric detection of the
CC mutational status at some or all of 16 point mutations (single nucleotide
CC polymorphism; SNPs). Genotyping the MDR-1 gene may indicate altered
CC expression or function of the encoded protein (which regulates the
CC transport of compounds, including drugs, across cell membranes), and thus
CC may indicate that changes in drug dosage are required. The method is
CC rapid, valid and inexpensive, and provides a high throughput screen with
CC only a few genotypic characteristics expected. Particularly mass analysis
CC takes only 4 seconds, so a four-fold multiplex reaction will allow all
CC positions to be determined in about 16 sec
XX
SQ Sequence 17 BP; 5 A; 5 C; 3 G; 3 T; 0 U; 1 Other;

Query Match 1.7%; Score 15; DB 1; Length 17;
Best Local Similarity 88.2%; Pred. No. 1.3e+02;
Matches 15; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

Qy 319 GGGCAATGTGACTGCTG 335
| ||||||:|||||||
Db 17 GTGCAATGTRACTGCTG 1

RESULT 167
AAF91028/c
ID AAF91028 standard; DNA; 17 BP.
XX
AC AAF91028;
XX
DT 04-MAY-2001 (first entry)
XX
DE Human multi drug resistance-1 gene related sequence SEQ ID NO: 115.
XX
KW Human; MDR-1; multi drug resistance-1; drug uptake; disease; cancer;
KW inflammatory disease; neuronal disease; CNS disease;
KW cardiovascular disease; PCR primer; ss.
XX
OS Homo sapiens.
XX
PN WO200109183-A2.
XX
PD 08-FEB-2001.
XX
PF 28-JUL-2000; 2000WO-EP007314.
XX
PR 30-JUL-1999; 99EP-00114938.
PR 22-FEB-2000; 2000EP-00103361.
XX
PA (EPID-) EPIDAUROS BIOTECHNOLOGIE AG.
XX
PI Brinkmann U, Hoffmeyer S, Eichelbaum M, Roots I;
XX
DR WPI; 2001-159855/16.
XX
PT New polynucleotide encoding a molecular variant Multi Drug Resistance
PT (MDR)-1 polypeptide is useful for diagnosing and treating diseases
PT associated with abnormal MDR-1 expression or function, e.g. cancer.
XX
PS Claim 36; Page 101; 154pp; English.
XX
CC The present invention provides nucleotides encoding molecular variants of
CC the human multi drug resistance-1 (MDR-1) protein. These can be used to
CC identify compounds capable of treating multidrug resistance and
CC sensitivity interfering resulting from polymorphisms in MDR-1, which can
CC lead to difficulties in treating cancer, cardiovascular, neuronal,
CC inflammatory and CNS diseases
XX
SQ Sequence 17 BP; 5 A; 5 C; 3 G; 3 T; 0 U; 1 Other;

Query Match 1.7%; Score 15; DB 1; Length 17;

```
  Best Local Similarity   88.2%;  Pred. No. 1.3e+02;
  Matches   15;  Conservative    1;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        319 GGGCAATGTGACTGCTG 335
              | ||||||| :|||||||
Db         17 GTGCAATGTRACTGCTG 1


RESULT 168
ABT38676
ID   ABT38676 standard; DNA; 17 BP.
XX
AC   ABT38676;
XX
DT   12-JUN-2003  (first entry)
XX
DE   Tumour suppression related human fukutin oligo SEQ ID No 4313.
XX
KW   Cytostatic; virucide; neuroprotective; nootropic; neuroleptic; gene chip;
KW   antisense; sense; tumour; cell degeneration; cancer; Alzheimer's disease;
KW   schizophrenia; protein chip; gene therapy; tumour suppression;
KW   human fukutin; ds.
XX
OS   Homo sapiens.
XX
PN   WO2003025175-A2.
XX
PD   27-MAR-2003.
XX
PF   17-SEP-2002; 2002WO-IB004208.
XX
PR   17-SEP-2001; 2001FR-00011978.
XX
PA   (MOLE-) MOLECULAR ENGINES LAB.
XX
PI   Telerman A,  Amson R,  Tuijnder M;
XX
DR   WPI; 2003-313353/30.
XX
PT   New isolated nucleic acid, useful for treating viral diseases associated
PT   with tumors and cell degeneration, also related polypeptides, antibodies
PT   and transfected cells.
XX
PS   Disclosure; Page 538; 720pp; French.
XX
CC   The invention relates to a novel isolated 17 mer nucleic acid sequence,
CC   given in the specification, a sequence containing at least 15 consecutive
CC   nucleotides from the 17 mer sequence, a sequence with, after optimal
CC   alignment, at least 80 % identity to the 17 mer sequence, a sequence that
CC   hybridizes to them under highly stringent conditions, or the complement
CC   of any of them, or the corresponding RNA. The novel isolated nucleic
CC   acids of the invention are useful as probes and primers for detecting,
CC   identifying, quantifying and/or amplifying a nucleic acid, e.g. as one
CC   component of a gene chip, in vitro as (anti)sense reagents, and for
CC   production of recombinant polypeptides. Any of the nucleic acids,
CC   polypeptides, vectors containing the nucleic acids, cells containing the
CC   vector or antibodies directed against the polypeptides are useful for
CC   preparation of pharmaceuticals for prevention and/or treatment of viral
CC   diseases that are characterised by development of tumours or cell
CC   degeneration, specifically cancer but also Alzheimer's disease and
CC   schizophrenia. Analysis of the expression of the 17 mer nucleic acids in
CC   patient samples is useful for diagnosis and/or prognosis of these
CC   diseases. The polypeptides can also be used to generate antibodies, and
CC   both the polypeptide and antibodies are useful as components of protein
CC   chips. The nucleic acid sequences of the invention can be used in gene
CC   therapy. This polynucleotide sequence represents a tumour suppression
CC   related human fukutin oligonucleotide of the invention
XX
SQ   Sequence 17 BP; 6 A; 3 C; 4 G; 4 T; 0 U; 0 Other;

  Query Match             1.7%;  Score 15;  DB 1;  Length 17;
  Best Local Similarity   100.0%;  Pred. No. 1.3e+02;
  Matches   15;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        811 TCAAGCCTGTGAATA 825
              |||||||||||||||
Db          3 TCAAGCCTGTGAATA 17


RESULT 169
ACF62526/c
ID   ACF62526 standard; DNA; 17 BP.
XX
AC   ACF62526;
XX
DT   08-OCT-2003  (first entry)
XX
DE   Cancer based on CYP3A5 related oligonucleotide SEQ ID NO:355.
XX
KW   Cancer; CYP3A5; irinotecan; pharmaceutical; malignant glioma;
KW   cytochrome p450; subfamily IIIA; nifedipine oxidase; polypeptide 5;
KW   cytostatic; PCR primer; ss.
XX
OS   Synthetic.
XX
PN   WO2003013534-A2.
XX
PD   20-FEB-2003.
XX
PF   23-JUL-2002; 2002WO-EP008219.
XX
PR   23-JUL-2001; 2001EP-00117608.
PR   24-MAY-2002; 2002EP-00011710.
XX
PA   (EPID-) EPIDAUROS BIOTECHNOLOGIE AG.
XX
PI   Heinrich G,  Kerb R;
XX
DR   WPI; 2003-268144/26.
XX
PT   New use of irinotecan for preparation of compositions for treating cancer
PT   in subject having genome with variant allele comprising cytochrome p450,
PT   subfamily IIIA, polypeptide 5 polynucleotide, termed CYP3A5.
XX
PS   Disclosure; Page 42; 86pp; English.
XX
CC   The present invention describes the use of irinotecan (I) or its
CC   derivative for the preparation of a pharmaceutical composition for
CC   treating colorectal, cervical, gastric, lung, ovarian or pancreatic
CC   cancer, or malignant glioma in a subject having a genome with a variant
CC   allele which comprises a cytochrome p450, subfamily IIIA (nifedipine
CC   oxidase), polypeptide 5 (CYP3A5) polynucleotide (II). (I) and (II) have
CC   cytostatic activity. The therapeutic applications of (I) is improved,
CC   since it is possible to individually treat a subject with an appropriate
CC   dosage and/or an appropriate derivative of (I). Therefore, undesirable,
CC   harmful or toxic effects are efficiently avoided. Unnecessary and
CC   potentially harmful treatment of those subjects who do not respond to the
CC   treatment with substances (nonresponders), as well as the development of
CC   drug resistances due to suboptimal drug dosing can be avoided. ACF62200
CC   to ACF62751 and ABM34912 to ABM35013 represent sequences used in the
CC   exemplification of the present invention
XX
SQ   Sequence 17 BP; 5 A; 5 C; 3 G; 3 T; 0 U; 1 Other;

  Query Match             1.7%;  Score 15;  DB 1;  Length 17;
  Best Local Similarity   88.2%;  Pred. No. 1.3e+02;
  Matches   15;  Conservative    1;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        319 GGGCAATGTGACTGCTG 335
              | ||||||| :|||||||
Db         17 GTGCAATGTRACTGCTG 1


RESULT 170
ADB21197/c
ID   ADB21197 standard; DNA; 17 BP.
```

```
XX
AC   ADB21197;
XX
DT   20-NOV-2003  (first entry)
XX
DE   MRP1 based cancer related nucleic acid SEQ ID NO:355.
XX
KW   irinotecan; colorectal cancer; cervical cancer; gastric cancer;
KW   lung cancer; ovarian cancer; pancreatic cancer; malignant glioma;
KW   variant allele; multidrug resistance protein 1; MRP1; cytostatic; gene;
KW   ds.
XX
OS   Unidentified.
XX
PN   WO2003013533-A2.
XX
PD   20-FEB-2003.
XX
PF   23-JUL-2002; 2002WO-EP008200.
XX
PR   23-JUL-2001; 2001EP-00117608.
PR   24-MAY-2002; 2002EP-00011710.
XX
PA   (EPID-) EPIDAUROS BIOTECHNOLOGIE AG.
XX
PI   Heinrich G,  Kerb R;
XX
DR   WPI; 2003-354397/33.
XX
PT   Use of irinotecan or its derivative for preparation of a pharmaceutical
PT   composition for treating cancer in a subject having a genome with a
PT   variant allele comprising a multidrug resistance protein 1
PT   polynucleotide.
XX
PS   Disclosure; Page 51; 100pp; English.
XX
CC   The present invention describes a method for the use of irinotecan (I) or
CC   its derivative for the preparation of a pharmaceutical composition for
CC   treating colorectal, cervical, gastric, lung, ovarian or pancreatic
CC   cancer, or malignant glioma in a subject having a genome with a variant
CC   allele which comprises a multidrug resistance protein 1 (MRP1)
CC   polynucleotide (II). (I) has cytostatic activity. (I) or its derivative
CC   can be used for the preparation of a pharmaceutical composition for
CC   treating colorectal, cervical, gastric, lung, ovarian or pancreatic
CC   cancer, or malignant glioma in a subject, where the subject is a human
CC   (preferably African or Asian) or a mouse. The present sequence represents
CC   a sequence which is used in the exemplification of the present invention.
XX
SQ   Sequence 17 BP; 5 A; 5 C; 3 G; 3 T; 0 U; 1 Other;

  Query Match             1.7%;  Score 15;  DB 1;  Length 17;
  Best Local Similarity   88.2%;  Pred. No. 1.3e+02;
  Matches   15;  Conservative    1;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        319 GGGCAATGTGACTGCTG 335
              | |||||||:|||||||
Db         17 GTGCAATGTRACTGCTG 1


RESULT 171
ADB88286/c
ID   ADB88286 standard; DNA; 17 BP.
XX
AC   ADB88286;
XX
DT   04-DEC-2003  (first entry)
XX
DE   Human UGT1A1 variant allele sequence fragment SEQ ID NO:327.
XX
KW   ss; irinotecan; cancer; UGT1A1; cytostatic; topoisomerase I inhibitor;
KW   colorectal cancer; cervical cancer; gastric cancer; lung cancer;
KW   ovarian cancer; pancreatic cancer; malignant glioma;
KW   uridine diphosphate glycosyltransferase1 member A1.
XX
OS   Homo sapiens.
XX
PN   WO2003013536-A2.
XX
PD   20-FEB-2003.
XX
PF   23-JUL-2002; 2002WO-EP008217.
XX
PR   23-JUL-2001; 2001EP-00117608.
PR   24-MAY-2002; 2002EP-00011710.
XX
PA   (EPID-) EPIDAUROS BIOTECHNOLOGIE AG.
XX
PI   Heinrich G,  Kerb R;
XX
DR   WPI; 2003-289896/28.
XX
PT   Use of irinotecan to treat cancer patient by determining if patient has
PT   variant alleles of UGT1A1 gene, administering increased/decreased amounts
PT   of irinotecan based on increased/decreased levels of UGT1A1 gene product.
XX
PS   Disclosure; Page 55; 107pp; English.
XX
CC   The invention relates to the novel use of irinotecan to treat a patient
CC   suffering from cancer. This involves determining if the patient has one
CC   or more variant alleles of the UGT1A1 gene, and if the patient has one or
CC   more of such variant alleles, irinotecan is administered in an increased
CC   or decreased amount in comparison to the amount that is administered
CC   without regard to the patient's alleles in the UGT1A1 gene. The invention
CC   has cytostatic activity. A composition of the invention acts as a
CC   topoisomerase I inhibitor. The method is useful for treating a patient,
CC   an animal e.g. mouse or a human, preferably African or Asian, suffering
CC   from cancer such as colorectal, cervical, gastric cancer, lung, ovarian,
CC   pancreatic cancer or malignant glioma. The present sequence is udes in
CC   the exemplification of the invention.
XX
SQ   Sequence 17 BP; 5 A; 5 C; 3 G; 3 T; 0 U; 1 Other;

  Query Match             1.7%;  Score 15;  DB 1;  Length 17;
  Best Local Similarity   88.2%;  Pred. No. 1.3e+02;
  Matches   15;  Conservative    1;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        319 GGGCAATGTGACTGCTG 335
              | |||||||:|||||||
Db         17 GTGCAATGTRACTGCTG 1


RESULT 172
ADB97269/c
ID   ADB97269 standard; DNA; 17 BP.
XX
AC   ADB97269;
XX
DT   04-DEC-2003  (first entry)
XX
DE   Human MDR1 variant allele sequence fragment SEQ ID NO:355.
XX
KW   irinotecan; colorectal cancer; cervical cancer; gastric cancer;
KW   lung cancer; ovarian cancer; pancreatic cancer; malignant glioma;
KW   multidrug resistance 1; MDR1; cytostatic; human; ds; Cyp3A5; MRP1; MDR1;
KW   TOP1.
XX
OS   Homo sapiens.
XX
PN   WO2003013537-A2.
XX
PD   20-FEB-2003.
XX
PF   23-JUL-2002; 2002WO-EP008218.
XX
PR   23-JUL-2001; 2001EP-00117608.
PR   24-MAY-2002; 2002EP-00011710.
```

XX
PA (EPID-) EPIDAUROS BIOTECHNOLOGIE AG.
XX
PI Heinrich G, Kerb R;
XX
DR WPI; 2003-268145/26.
XX
PT New use of irinotecan for preparation of pharmaceutical compositions for
PT treating cancer in subject having genome with variant allele comprising
PT multidrug resistance 1 polynucleotide.
XX
PS Disclosure; Page 79; 130pp; English.
XX
CC The invention relates to the novel use of irinotecan or its derivative
CC for the preparation of pharmaceutical compositions for treating
CC colorectal, cervical, gastric, lung, ovarian or pancreatic cancer, or
CC malignant glioma in a subject having a genome with a variant allele which
CC comprises a multidrug resistance 1 (MDR1) polynucleotide. A composition
CC of the invention has cytostatic activity. The invention is useful for the
CC preparation of pharmaceutical compositions for treating colorectal,
CC cervical, gastric, lung, ovarian or pancreatic cancer, or malignant
CC glioma in a subject (preferably human, more preferably African or Asian)
CC or a mouse. The present sequence is used in the exemplification of the
CC invention.
XX
SQ Sequence 17 BP; 5 A; 5 C; 3 G; 3 T; 0 U; 1 Other;

Query Match 1.7%; Score 15; DB 1; Length 17;
Best Local Similarity 88.2%; Pred. No. 1.3e+02;
Matches 15; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

Qy 319 GGGCAATGTGACTGCTG 335
| ||||||:|||||||
Db 17 GTGCAATGTRACTGCTG 1

RESULT 173
ADB92460/c
ID ADB92460 standard; DNA; 17 BP.
XX
AC ADB92460;
XX
DT 04-DEC-2003 (first entry)
XX
DE Human MDR1 variant allele sequence fragment SEQ ID NO:355.
XX
KW irinotecan; colorectal cancer; cervical cancer; gastric cancer;
KW lung cancer; ovarian cancer; pancreatic cancer; malignant glioma;
KW multidrug resistance 1; MDR1; cytostatic; ds; human; UGT1A1; MRP1; TOP1.
XX
OS Homo sapiens.
XX
PN WO2003013535-A2.
XX
PD 20-FEB-2003.
XX
PF 23-JUL-2002; 2002WO-EP008220.
XX
PR 23-JUL-2001; 2001EP-00117608.
PR 24-MAY-2002; 2002EP-00011710.
XX
PA (EPID-) EPIDAUROS BIOTECHNOLOGIE AG.
XX
PI Heinrich G, Kerb R;
XX
DR WPI; 2003-342400/32.
XX
PT New use of irinotecan for preparation of pharmaceutical compositions for
PT treating cancer in subject having genome with variant allele comprising
PT multidrug resistance 1 polynucleotide.
XX
PS Disclosure; Page 50; 104pp; English.
XX
CC The invention relates ro a novel use of irinotecan or its derivative for
CC the preparation of a pharmaceutical composition for treating colorectal,
CC cervical, gastric, lung, ovarian or pancreatic cancer, or malignant
CC glioma in a subject having a genome with a variant allele which comprises
CC a multidrug resistance 1 (MDR1) polynucleotide. A composition of the
CC invention has cytostatic activity. The present sequence is used in the
CC exemplification of the invention.
XX
SQ Sequence 17 BP; 5 A; 5 C; 3 G; 3 T; 0 U; 1 Other;

Query Match 1.7%; Score 15; DB 1; Length 17;
Best Local Similarity 88.2%; Pred. No. 1.3e+02;
Matches 15; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

Qy 319 GGGCAATGTGACTGCTG 335
| ||||||:|||||||
Db 17 GTGCAATGTRACTGCTG 1

RESULT 174
AAA23007/c
ID AAA23007 standard; RNA; 17 BP.
XX
AC AAA23007;
XX
DT 19-JUN-2000 (first entry)
XX
DE Integrin subunit beta 3 substrate sequence SEQ ID NO:6233.
XX
KW Human; aryl hydrocarbon nuclear transport; ARNT; TIE-2; angiogenesis;
KW integrin alpha 6 subunit; integrin subunit beta 3; hairpin ribozyme;
KW hammerhead ribozyme; angiogenic factor; cytostatic; antidiabetic;
KW ophthalmologic; antiinflammatory; antiarthritic; antipsoriatic; ARMD;
KW dermatological; RNA cleavage; cancer; diabetic retinopathy; arthritis;
KW age related macular degeneration; inflammation; neovascular glaucoma;
KW myopic degeneration; psoriasis; verruca vulgaris; angiofibroma;
KW tuberous sclerosis; pot-wine stain; Sturge Weber syndrome;
KW Kippel-Trenaunay-Weber syndrome; Osler-Weber-Rendu syndrome; ss.
XX
OS Homo sapiens.
XX
PN WO9950403-A2.
XX
PD 07-OCT-1999.
XX
PF 24-MAR-1999; 99WO-US006507.
XX
PR 27-MAR-1998; 98US-0079678P.
XX
PA (RIBO-) RIBOZYME PHARM INC.
XX
PI Pavco PA, Roberts E, Jarvis T, Coeshott C, Mcswiggen JA;
XX
DR WPI; 1999-591315/50.
XX
PT Novel ribozymes for modulating the synthesis, expression and/or stability
PT of an mRNA encoding an angiogenic factors.
XX
PS Claim 54; Page 256; 305pp; English.
XX
CC The present invention describes enzymatic nucleic acid molecules with RNA
CC cleaving activity, which specifically cleave RNA encoded by an aryl
CC hydrocarbon nuclear transporter (ARNT) gene, an integrin subunit beta 3
CC gene, an integrin alpha 6 subunit gene, or a Tie-2 gene. AAA16775 to
CC AAA17167 and AAA17561 to AAA17622 represent ribozyme sequences for ARNT,
CC and AAA17168 to AAA17560 and AAA17623 to AAA17684 represent their
CC corresponding target sequences; AAA17685 to AAA18385 and AAA19087 to
CC AAA19154 represent ribozyme sequences for Tie-2, and AAA18386 to AAA19086
CC and AAA19155 to AAA19222 represent their corresponding target sequences;
CC AAA19223 to AAA20361 and AAA21501 to AAA21595 represent ribozyme
CC sequences for integrin alpha 6 subunit, and AAA20362 to AAA21500 and
CC AAA21596 to AAA21688 represent their corresponding target sequences;
CC AAA21689 to AAA22475 and AAA23263 to AAA23342 represent ribozyme sequence

```
CC   for integrin subunit beta 3, and AAA22476 to AAA23262, AAA23343 to
CC   AAA23422 represent their corresponding target sequences. The ribozymes of
CC   the invention are used for modulating the synthesis, expression and/or
CC   stability of an mRNA encoding angiogenic factor, especially ARNT,
CC   integrin subunit beta-3, integrin subunit alpha-6, or Tie-2. They are
CC   especially used to treat cancer, diabetic retinopathy, age related
CC   macular degeneration (ARMD), inflammation, and arthritis, as well as
CC   neovascular glaucoma, myopic degeneration, psoriasis, verruca vulgaris,
CC   angiofibroma of tuberous sclerosis, pot-wine stains, Sturge Weber
CC   syndrome, Kippel-Trenaunay-Weber syndrome, Osler-Weber-Rendu syndrome,
CC   and other syndromes and diseases related to the levels of ARNT, Tie-2,
CC   integrin subunit alpha-6, or integrin subunit beta-3
XX
SQ   Sequence 17 BP; 6 A; 4 C; 1 G; 0 T; 6 U; 0 Other;

  Query Match             1.6%;  Score 14.4;  DB 1;  Length 17;
  Best Local Similarity   93.8%;  Pred. No. 1.5e+02;
  Matches   15;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        676 AGAAACTGATTTATGA 691
              ||||||||||||| |||
Db         16 AGAAACTGATTTGTGA 1


RESULT 175
AAF05438
ID   AAF05438 standard; DNA; 17 BP.
XX
AC   AAF05438;
XX
DT   16-FEB-2001  (first entry)
XX
DE   Hammerhead ribozyme substrate #2657.
XX
KW   Ribozyme; erythropoietin; granulocyte colony stimulating factor;
KW   interferon alpha; ss.
XX
OS   Homo sapiens.
XX
PN   WO200061729-A2.
XX
PD   19-OCT-2000.
XX
PF   11-APR-2000; 2000WO-US009721.
XX
PR   12-APR-1999;   99US-0129390P.
XX
PA   (RIBO-) RIBOZYME PHARM INC.
XX
PI   Blatt L,  Zwick M,  Pavco P,  Mcswiggen J;
XX
DR   WPI; 2000-647423/62.
XX
PT   Enzymatic and antisense nucleic acid inhibition of repressor genes,
PT   useful for producing e.g. granulocyte colony stimulating factor protein,
PT   interferon alpha and erythropoietin.
XX
PS   Claim 18; Page 116; 164pp; English.
XX
CC   The present invention relates to enzymatic and antisense nucleic acid
CC   molecules that act as inhibitors of the expression of repressor genes
CC   encoding the TR2 Orphan receptor, EAR3/COUP-TF-1, the GATA transcription
CC   factor gene, IRF-2 and/or the CAATT Displacement Protein (CDP).
CC   Inhibition of the repressors removes prevents inhibition (and
CC   consequently increases expression of) genes involved in the production of
CC   erythropoietin, granulocyte colony stimulating factor protein and
CC   interferon alpha
XX
SQ   Sequence 17 BP; 7 A; 3 C; 4 G; 3 T; 0 U; 0 Other;

  Query Match             1.6%;  Score 14.4;  DB 1;  Length 17;
  Best Local Similarity   93.8%;  Pred. No. 1.5e+02;
  Matches   15;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        135 AGGAAAGTAATGGACC 150
              |||||| |||||||||
Db          1 AGGAAACTAATGGACC 16


RESULT 176
AAF03384/c
ID   AAF03384 standard; DNA; 17 BP.
XX
AC   AAF03384;
XX
DT   16-FEB-2001  (first entry)
XX
DE   Hammerhead ribozyme substrate #1679.
XX
KW   Ribozyme; erythropoietin; granulocyte colony stimulating factor;
KW   interferon alpha; ss.
XX
OS   Homo sapiens.
XX
PN   WO200061729-A2.
XX
PD   19-OCT-2000.
XX
PF   11-APR-2000; 2000WO-US009721.
XX
PR   12-APR-1999;   99US-0129390P.
XX
PA   (RIBO-) RIBOZYME PHARM INC.
XX
PI   Blatt L,  Zwick M,  Pavco P,  Mcswiggen J;
XX
DR   WPI; 2000-647423/62.
XX
PT   Enzymatic and antisense nucleic acid inhibition of repressor genes,
PT   useful for producing e.g. granulocyte colony stimulating factor protein,
PT   interferon alpha and erythropoietin.
XX
PS   Claim 37; Page 94; 164pp; English.
XX
CC   The present invention relates to enzymatic and antisense nucleic acid
CC   molecules that act as inhibitors of the expression of repressor genes
CC   encoding the TR2 Orphan receptor, EAR3/COUP-TF-1, the GATA transcription
CC   factor gene, IRF-2 and/or the CAATT Displacement Protein (CDP).
CC   Inhibition of the repressors removes prevents inhibition (and
CC   consequently increases expression of) genes involved in the production of
CC   erythropoietin, granulocyte colony stimulating factor protein and
CC   interferon alpha
XX
SQ   Sequence 17 BP; 2 A; 2 C; 2 G; 11 T; 0 U; 0 Other;

  Query Match             1.6%;  Score 14.4;  DB 1;  Length 17;
  Best Local Similarity   93.8%;  Pred. No. 1.5e+02;
  Matches   15;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        458 AATGAAGAAAGTACAA 473
              |||||||||| |||||
Db         16 AATGAAGAAAATACAA 1


RESULT 177
AAF03381/c
ID   AAF03381 standard; DNA; 17 BP.
XX
AC   AAF03381;
XX
DT   16-FEB-2001  (first entry)
XX
DE   Hammerhead ribozyme substrate #1676.
XX
KW   Ribozyme; erythropoietin; granulocyte colony stimulating factor;
KW   interferon alpha; ss.
```

XX
OS Homo sapiens.
XX
PN WO200061729-A2.
XX
PD 19-OCT-2000.
XX
PF 11-APR-2000; 2000WO-US009721.
XX
PR 12-APR-1999; 99US-0129390P.
XX
PA (RIBO-) RIBOZYME PHARM INC.
XX
PI Blatt L, Zwick M, Pavco P, Mcswiggen J;
XX
DR WPI; 2000-647423/62.
XX
PT Enzymatic and antisense nucleic acid inhibition of repressor genes,
PT useful for producing e.g. granulocyte colony stimulating factor protein,
PT interferon alpha and erythropoietin.
XX
PS Claim 37; Page 94; 164pp; English.
XX
CC The present invention relates to enzymatic and antisense nucleic acid
CC molecules that act as inhibitors of the expression of repressor genes
CC encoding the TR2 Orphan receptor, EAR3/COUP-TF-1, the GATA transcription
CC factor gene, IRF-2 and/or the CAATT Displacement Protein (CDP).
CC Inhibition of the repressors removes prevents inhibition (and
CC consequently increases expression of) genes involved in the production of
CC erythropoietin, granulocyte colony stimulating factor protein and
CC interferon alpha
XX
SQ Sequence 17 BP; 1 A; 4 C; 1 G; 11 T; 0 U; 0 Other;

Query Match 1.6%; Score 14.4; DB 1; Length 17;
Best Local Similarity 93.8%; Pred. No. 1.5e+02;
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 461 GAAGAAAGTACAAAGA 476
||||||| ||||||||
Db 17 GAAGAAAATACAAAGA 2

RESULT 178
ABK02234/c
ID ABK02234 standard; RNA; 17 BP.
XX
AC ABK02234;
XX
DT 12-MAR-2002 (first entry)
XX
DE Human NOGO DNAzyme #146.
XX
KW Human; ss; antisense therapy; cytostatic; antiinflammatory; haemostatic;
KW cerebroprotective; nootropic; neuroprotective; antiparkinsonian;
KW muscular; CD20; neurite growth inhibitor gene; NOGO; hammerhead ribozyme;
KW DNAzyme; inozyme; G-cleaver; amberzyme; zinzyme; lymphoma; leukaemia;
KW B-cell lymphoma; non-Hodgkin's lymphoma; NHL; lymphocytic leukaemia;
KW human immunodeficiency virus; HIV associated NHL; mantle-cell lymphoma;
KW MCL; immunocytoma; IMC; immune thrombocytopaenia; stroke; dementia;
KW inflammatory arthropathy; central nervous system injury;
KW cerebrovascular accident; CVA; Alzheimer's disease; multiple sclerosis;
KW chemotherapy-induced neuropathy; amyotrophic lateral sclerosis; ALS;
KW Parkinson's disease; ataxia; Huntington's disease;
KW Creutzfeldt-Jakob disease; muscular dystrophy; neurodegenerative disease.
XX
OS Homo sapiens.
OS Synthetic.
XX
PN WO200159103-A2.
XX
PD 16-AUG-2001.
XX
PF 09-FEB-2001; 2001WO-US004273.
XX
PR 11-FEB-2000; 2000US-0181797P.
PR 28-FEB-2000; 2000US-0185516P.
PR 06-MAR-2000; 2000US-0187128P.
XX
PA (RIBO-) RIBOZYME PHARM INC.
PA (BLAT/) BLATT L.
PA (MCSW/) MCSWIGGEN J.
PA (CHOW/) CHOWRIRA B M.
XX
PI Blatt L, Mcswiggen J, Chowrira BM;
XX
DR WPI; 2001-607195/69.
XX
PT Nucleic acid molecules, e.g., enzymatic nucleic acids and antisense
PT constructs, which down regulate expression of a CD20 gene or neurite
PT growth inhibitor gene useful for treating, e.g., lymphoma, leukemia, and
PT central nervous system injury.
XX
PS Claim 88; Page 115; 200pp; English.
XX
CC The invention relates to a nucleic acid molecule which down regulates
CC expression of a CD20 gene and a nucleic acid molecule which down
CC regulates expression of a neurite growth inhibitor gene (NOGO). The
CC nucleic acids may be enzymatic nucleic acids (e.g. a ribozyme or a
CC DNAzyme) an Inozyme (an endolytic nucleic acid cleaving a an RNA molecule
CC possessing an NCH motif), a G-cleaver (cleaving RNA with a NYN motif) pr
CC an amberzyme (cleaving RNA with an NGN triplet), a zinzyme (cleaving RNA
CC with a YGY motif). The CD20-targetting nucleic acid is used to cleave RNA
CC of CD20 in the presence of a divalent cation that is preferably Mg^2^+.
CC Furthermore, it may be contacted with a cell to reduce CD20 activity of
CC the cell and treat a patient having a condition associated with the level
CC of CD20. The treatment may further comprise the use of one or more
CC therapies. In particular, the CD20 targetting nucleic acid may be used to
CC treat lymphoma, leukaemia, B-cell lymphoma, low-grade or follicular non-
CC Hodgkin's lymphoma (NHL), bulky low-grade or follicular NHL, lymphocytic
CC leukaemia, HIV (human immunodeficiency virus) associated NHL, mantle-cell
CC lymphoma (MCL), immunocytoma (IMC), small B-cell lymphocytic lymphoma,
CC immune thrombocytopaenia, and inflammatory arthropathy. The NOGO-
CC targetting nucleic acid is used to cleave RNA of the NOGO gene in the
CC presence of a divalent cation that is preferably Mg^2^+. Furthermore, the
CC nucleic acid may be contacted with a cell to reduce NOGO activity of the
CC cell and treat a patient having a condition associated with the level of
CC NOGO. The treatment may further comprise the use of one or more
CC therapies. In particular, the NOGO-targetting nucleic acid may be used to
CC treat central nervous system (CNS) injury and cerebrovascular accident
CC (CVA, stroke), Alzheimer's disease, dementia, multiple sclerosis (MS),
CC chemotherapy-induced neuropathy, amyotrophic lateral sclerosis (ALS),
CC Parkinson's disease, ataxia, Huntington's disease, Creutzfeldt-Jakob
CC disease, muscular dystrophy, and/or other neurodegenerative disease
CC states which respond to the modulation of NOGO expression. The present
CC sequence is a DNAzyme molecule of the invention
XX
SQ Sequence 17 BP; 5 A; 1 C; 2 G; 0 T; 9 U; 0 Other;

Query Match 1.6%; Score 14.4; DB 1; Length 17;
Best Local Similarity 93.8%; Pred. No. 1.5e+02;
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 857 TTAAAAGAATCCAAAT 872
||||||| |||||||
Db 17 TTAAAAGATTCCAAAT 2

RESULT 179
ABK02326
ID ABK02326 standard; RNA; 17 BP.
XX
AC ABK02326;
XX
DT 12-MAR-2002 (first entry)
XX

DE Human NOGO DNAzyme #238.
XX
KW Human; ss; antisense therapy; cytostatic; antiinflammatory; haemostatic;
KW cerebroprotective; nootropic; neuroprotective; antiparkinsonian;
KW muscular; CD20; neurite growth inhibitor gene; NOGO; hammerhead ribozyme;
KW DNAzyme; inozyme; G-cleaver; amberzyme; zinzyme; lymphoma; leukaemia;
KW B-cell lymphoma; non-Hodgkin's lymphoma; NHL; lymphocytic leukaemia;
KW human immunodeficiency virus; HIV associated NHL; mantle-cell lymphoma;
KW MCL; immunocytoma; IMC; immune thrombocytopaenia; stroke; dementia;
KW inflammatory arthropathy; central nervous system injury;
KW cerebrovascular accident; CVA; Alzheimer's disease; multiple sclerosis;
KW chemotherapy-induced neuropathy; amyotrophic lateral sclerosis; ALS;
KW Parkinson's disease; ataxia; Huntington's disease;
KW Creutzfeldt-Jakob disease; muscular dystrophy; neurodegenerative disease.
XX
OS Homo sapiens.
OS Synthetic.
XX
PN WO200159103-A2.
XX
PD 16-AUG-2001.
XX
PF 09-FEB-2001; 2001WO-US004273.
XX
PR 11-FEB-2000; 2000US-0181797P.
PR 28-FEB-2000; 2000US-0185516P.
PR 06-MAR-2000; 2000US-0187128P.
XX
PA (RIBO-) RIBOZYME PHARM INC.
PA (BLAT/) BLATT L.
PA (MCSW/) MCSWIGGEN J.
PA (CHOW/) CHOWRIRA B M.
XX
PI Blatt L, Mcswiggen J, Chowrira BM;
XX
DR WPI; 2001-607195/69.
XX
PT Nucleic acid molecules, e.g., enzymatic nucleic acids and antisense
PT constructs, which down regulate expression of a CD20 gene or neurite
PT growth inhibitor gene useful for treating, e.g., lymphoma, leukemia, and
PT central nervous system injury.
XX
PS Claim 88; Page 116; 200pp; English.
XX
CC The invention relates to a nucleic acid molecule which down regulates
CC expression of a CD20 gene and a nucleic acid molecule which down
CC regulates expression of a neurite growth inhibitor gene (NOGO). The
CC nucleic acids may be enzymatic nucleic acids (e.g. a ribozyme or a
CC DNAzyme) an Inozyme (an endolytic nucleic acid cleaving a an RNA molecule
CC possessing an NCH motif), a G-cleaver (cleaving RNA with a NYN motif) pr
CC an amberzyme (cleaving RNA with an NGN triplet), a zinzyme (cleaving RNA
CC with a YGY motif). The CD20-targetting nucleic acid is used to cleave RNA
CC of CD20 in the presence of a divalent cation that is preferably Mg^2^+.
CC Furthermore, it may be contacted with a cell to reduce CD20 activity of
CC the cell and treat a patient having a condition associated with the level
CC of CD20. The treatment may further comprise the use of one or more
CC therapies. In particular, the CD20 targetting nucleic acid may be used to
CC treat lymphoma, leukaemia, B-cell lymphoma, low-grade or follicular non-
CC Hodgkin's lymphoma (NHL), bulky low-grade or follicular NHL, lymphocytic
CC leukaemia, HIV (human immunodeficiency virus) associated NHL, mantle-cell
CC lymphoma (MCL), immunocytoma (IMC), small B-cell lymphocytic lymphoma,
CC immune thrombocytopaenia, and inflammatory arthropathy. The NOGO-
CC targetting nucleic acid is used to cleave RNA of the NOGO gene in the
CC presence of a divalent cation that is preferably Mg^2^+. Furthermore, the
CC nucleic acid may be contacted with a cell to reduce NOGO activity of the
CC cell and treat a patient having a condition associated with the level of
CC NOGO. The treatment may further comprise the use of one or more
CC therapies. In particular, the NOGO-targetting nucleic acid may be used to
CC treat central nervous system (CNS) injury and cerebrovascular accident
CC (CVA, stroke), Alzheimer's disease, dementia, multiple sclerosis (MS),
CC chemotherapy-induced neuropathy, amyotrophic lateral sclerosis (ALS),
CC Parkinson's disease, ataxia, Huntington's disease, Creutzfeldt-Jakob
CC disease, muscular dystrophy, and/or other neurodegenerative disease
CC states which respond to the modulation of NOGO expression. The present
CC sequence is a DNAzyme molecule of the invention
XX
SQ Sequence 17 BP; 10 A; 2 C; 1 G; 0 T; 4 U; 0 Other;

Query Match 1.6%; Score 14.4; DB 1; Length 17;
Best Local Similarity 68.8%; Pred. No. 1.5e+02;
Matches 11; Conservative 4; Mismatches 1; Indels 0; Gaps 0;

Qy 822 AATAAAAACCCTGTAT 837
||:||||| ||:|:|:
Db 1 AAUAAAAAACCUGUAU 16

RESULT 180
ABT37806
ID ABT37806 standard; DNA; 17 BP.
XX
AC ABT37806;
XX
DT 12-JUN-2003 (first entry)
XX
DE Tumour suppression related human fukutin oligo SEQ ID No 3443.
XX
KW Cytostatic; virucide; neuroprotective; nootropic; neuroleptic; gene chip;
KW antisense; sense; tumour; cell degeneration; cancer; Alzheimer's disease;
KW schizophrenia; protein chip; gene therapy; tumour suppression;
KW human fukutin; ds.
XX
OS Homo sapiens.
XX
PN WO2003025175-A2.
XX
PD 27-MAR-2003.
XX
PF 17-SEP-2002; 2002WO-IB004208.
XX
PR 17-SEP-2001; 2001FR-00011978.
XX
PA (MOLE-) MOLECULAR ENGINES LAB.
XX
PI Telerman A, Amson R, Tuijnder M;
XX
DR WPI; 2003-313353/30.
XX
PT New isolated nucleic acid, useful for treating viral diseases associated
PT with tumors and cell degeneration, also related polypeptides, antibodies
PT and transfected cells.
XX
PS Disclosure; Page 436; 720pp; French.
XX
CC The invention relates to a novel isolated 17 mer nucleic acid sequence,
CC given in the specification, a sequence containing at least 15 consecutive
CC nucleotides from the 17 mer sequence, a sequence with, after optimal
CC alignment, at least 80 % identity to the 17 mer sequence, a sequence that
CC hybridizes to them under highly stringent conditions, or the complement
CC of any of them, or the corresponding RNA. The novel isolated nucleic
CC acids of the invention are useful as probes and primers for detecting,
CC identifying, quantifying and/or amplifying a nucleic acid, e.g. as one
CC component of a gene chip, in vitro as (anti)sense reagents, and for
CC production of recombinant polypeptides. Any of the nucleic acids,
CC polypeptides, vectors containing the nucleic acids, cells containing the
CC vector or antibodies directed against the polypeptides are useful for
CC preparation of pharmaceuticals for prevention and/or treatment of viral
CC diseases that are characterised by development of tumours or cell
CC degeneration, specifically cancer but also Alzheimer's disease and
CC schizophrenia. Analysis of the expression of the 17 mer nucleic acids in
CC patient samples is useful for diagnosis and/or prognosis of these
CC diseases. The polypeptides can also be used to generate antibodies, and
CC both the polypeptide and antibodies are useful as components of protein
CC chips. The nucleic acid sequences of the invention can be used in gene
CC therapy. This polynucleotide sequence represents a tumour suppression
CC related human fukutin oligonucleotide of the invention

```
XX
SQ   Sequence 17 BP; 6 A; 1 C; 3 G; 7 T; 0 U; 0 Other;

  Query Match             1.6%;  Score 14.4;  DB 1;  Length 17;
  Best Local Similarity   93.8%;  Pred. No. 1.5e+02;
  Matches   15;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        620 ATCTTAAAAGTGTAAT 635
              ||||||||||||| ||
Db          2 ATCTTAAAAGTGTTAT 17


RESULT 181
ABT39717
ID   ABT39717 standard; DNA; 17 BP.
XX
AC   ABT39717;
XX
DT   12-JUN-2003  (first entry)
XX
DE   Tumour suppression related human fukutin oligo SEQ ID No 5354.
XX
KW   Cytostatic; virucide; neuroprotective; nootropic; neuroleptic; gene chip;
KW   antisense; sense; tumour; cell degeneration; cancer; Alzheimer's disease;
KW   schizophrenia; protein chip; gene therapy; tumour suppression;
KW   human fukutin; ds.
XX
OS   Homo sapiens.
XX
PN   WO2003025175-A2.
XX
PD   27-MAR-2003.
XX
PF   17-SEP-2002; 2002WO-IB004208.
XX
PR   17-SEP-2001; 2001FR-00011978.
XX
PA   (MOLE-) MOLECULAR ENGINES LAB.
XX
PI   Telerman A,  Amson R,  Tuijnder M;
XX
DR   WPI; 2003-313353/30.
XX
PT   New isolated nucleic acid, useful for treating viral diseases associated
PT   with tumors and cell degeneration, also related polypeptides, antibodies
PT   and transfected cells.
XX
PS   Disclosure; Page 659; 720pp; French.
XX
CC   The invention relates to a novel isolated 17 mer nucleic acid sequence,
CC   given in the specification, a sequence containing at least 15 consecutive
CC   nucleotides from the 17 mer sequence, a sequence with, after optimal
CC   alignment, at least 80 % identity to the 17 mer sequence, a sequence that
CC   hybridizes to them under highly stringent conditions, or the complement
CC   of any of them, or the corresponding RNA. The novel isolated nucleic
CC   acids of the invention are useful as probes and primers for detecting,
CC   identifying, quantifying and/or amplifying a nucleic acid, e.g. as one
CC   component of a gene chip, in vitro as (anti)sense reagents, and for
CC   production of recombinant polypeptides. Any of the nucleic acids,
CC   polypeptides, vectors containing the nucleic acids, cells containing the
CC   vector or antibodies directed against the polypeptides are useful for
CC   preparation of pharmaceuticals for prevention and/or treatment of viral
CC   diseases that are characterised by development of tumours or cell
CC   degeneration, specifically cancer but also Alzheimer's disease and
CC   schizophrenia. Analysis of the expression of the 17 mer nucleic acids in
CC   patient samples is useful for diagnosis and/or prognosis of these
CC   diseases. The polypeptides can also be used to generate antibodies, and
CC   both the polypeptide and antibodies are useful as components of protein
CC   chips. The nucleic acid sequences of the invention can be used in gene
CC   therapy. This polynucleotide sequence represents a tumour suppression
CC   related human fukutin oligonucleotide of the invention
XX
SQ   Sequence 17 BP; 4 A; 5 C; 3 G; 5 T; 0 U; 0 Other;

  Query Match             1.6%;  Score 14.4;  DB 1;  Length 17;
  Best Local Similarity   93.8%;  Pred. No. 1.5e+02;
  Matches   15;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        376 GATCTCACTCTCAGGA 391
              ||||||| ||||||||
Db          1 GATCTCATTCTCAGGA 16


RESULT 182
ACF62525
ID   ACF62525 standard; DNA; 17 BP.
XX
AC   ACF62525;
XX
DT   08-OCT-2003  (first entry)
XX
DE   Cancer based on CYP3A5 related oligonucleotide SEQ ID NO:354.
XX
KW   Cancer; CYP3A5; irinotecan; pharmaceutical; malignant glioma;
KW   cytochrome p450; subfamily IIIA; nifedipine oxidase; polypeptide 5;
KW   cytostatic; PCR primer; ss.
XX
OS   Synthetic.
XX
PN   WO2003013534-A2.
XX
PD   20-FEB-2003.
XX
PF   23-JUL-2002; 2002WO-EP008219.
XX
PR   23-JUL-2001; 2001EP-00117608.
PR   24-MAY-2002; 2002EP-00011710.
XX
PA   (EPID-) EPIDAUROS BIOTECHNOLOGIE AG.
XX
PI   Heinrich G,  Kerb R;
XX
DR   WPI; 2003-268144/26.
XX
PT   New use of irinotecan for preparation of compositions for treating cancer
PT   in subject having genome with variant allele comprising cytochrome p450,
PT   subfamily IIIA, polypeptide 5 polynucleotide, termed CYP3A5.
XX
PS   Disclosure; Page 42; 86pp; English.
XX
CC   The present invention describes the use of irinotecan (I) or its
CC   derivative for the preparation of a pharmaceutical composition for
CC   treating colorectal, cervical, gastric, lung, ovarian or pancreatic
CC   cancer, or malignant glioma in a subject having a genome with a variant
CC   allele which comprises a cytochrome p450, subfamily IIIA (nifedipine
CC   oxidase), polypeptide 5 (CYP3A5) polynucleotide (II). (I) and (II) have
CC   cytostatic activity. The therapeutic applications of (I) is improved,
CC   since it is possible to individually treat a subject with an appropriate
CC   dosage and/or an appropriate derivative of (I). Therefore, undesirable,
CC   harmful or toxic effects are efficiently avoided. Unnecessary and
CC   potentially harmful treatment of those subjects who do not respond to the
CC   treatment with substances (nonresponders), as well as the development of
CC   drug resistances due to suboptimal drug dosing can be avoided. ACF62200
CC   to ACF62751 and ABM34912 to ABM35013 represent sequences used in the
CC   exemplification of the present invention
XX
SQ   Sequence 17 BP; 5 A; 3 C; 4 G; 5 T; 0 U; 0 Other;

  Query Match             1.6%;  Score 14.4;  DB 1;  Length 17;
  Best Local Similarity   93.8%;  Pred. No. 1.5e+02;
  Matches   15;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        321 GCAATGTGACTGCTGA 336
              ||||||| ||||||||
Db          2 GCAATGTAACTGCTGA 17
```

```
RESULT 183
ACF62524/c
ID   ACF62524 standard; DNA; 17 BP.
XX
AC   ACF62524;
XX
DT   08-OCT-2003  (first entry)
XX
DE   Cancer based on CYP3A5 related oligonucleotide SEQ ID NO:353.
XX
KW   Cancer; CYP3A5; irinotecan; pharmaceutical; malignant glioma;
KW   cytochrome p450; subfamily IIIA; nifedipine oxidase; polypeptide 5;
KW   cytostatic; PCR primer; ss.
XX
OS   Synthetic.
XX
PN   WO2003013534-A2.
XX
PD   20-FEB-2003.
XX
PF   23-JUL-2002; 2002WO-EP008219.
XX
PR   23-JUL-2001; 2001EP-00117608.
PR   24-MAY-2002; 2002EP-00011710.
XX
PA   (EPID-) EPIDAUROS BIOTECHNOLOGIE AG.
XX
PI   Heinrich G,  Kerb R;
XX
DR   WPI; 2003-268144/26.
XX
PT   New use of irinotecan for preparation of compositions for treating cancer
PT   in subject having genome with variant allele comprising cytochrome p450,
PT   subfamily IIIA, polypeptide 5 polynucleotide, termed CYP3A5.
XX
PS   Disclosure; Page 42; 86pp; English.
XX
CC   The present invention describes the use of irinotecan (I) or its
CC   derivative for the preparation of a pharmaceutical composition for
CC   treating colorectal, cervical, gastric, lung, ovarian or pancreatic
CC   cancer, or malignant glioma in a subject having a genome with a variant
CC   allele which comprises a cytochrome p450, subfamily IIIA (nifedipine
CC   oxidase), polypeptide 5 (CYP3A5) polynucleotide (II). (I) and (II) have
CC   cytostatic activity. The therapeutic applications of (I) is improved,
CC   since it is possible to individually treat a subject with an appropriate
CC   dosage and/or an appropriate derivative of (I). Therefore, undesirable,
CC   harmful or toxic effects are efficiently avoided. Unnecessary and
CC   potentially harmful treatment of those subjects who do not respond to the
CC   treatment with substances (nonresponders), as well as the development of
CC   drug resistances due to suboptimal drug dosing can be avoided. ACF62200
CC   to ACF62751 and ABM34912 to ABM35013 represent sequences used in the
CC   exemplification of the present invention
XX
SQ   Sequence 17 BP; 5 A; 4 C; 3 G; 5 T; 0 U; 0 Other;

  Query Match             1.6%;  Score 14.4;  DB 1;  Length 17;
  Best Local Similarity   93.8%;  Pred. No. 1.5e+02;
  Matches   15;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        321 GCAATGTGACTGCTGA 336
              ||||||| ||||||||
Db         16 GCAATGTAACTGCTGA 1


RESULT 184
ADB21195/c
ID   ADB21195 standard; DNA; 17 BP.
XX
AC   ADB21195;
XX
DT   20-NOV-2003  (first entry)
XX
DE   MRP1 based cancer related nucleic acid SEQ ID NO:353.
XX
KW   irinotecan; colorectal cancer; cervical cancer; gastric cancer;
KW   lung cancer; ovarian cancer; pancreatic cancer; malignant glioma;
KW   variant allele; multidrug resistance protein 1; MRP1; cytostatic; gene;
KW   ds.
XX
OS   Unidentified.
XX
PN   WO2003013533-A2.
XX
PD   20-FEB-2003.
XX
PF   23-JUL-2002; 2002WO-EP008200.
XX
PR   23-JUL-2001; 2001EP-00117608.
PR   24-MAY-2002; 2002EP-00011710.
XX
PA   (EPID-) EPIDAUROS BIOTECHNOLOGIE AG.
XX
PI   Heinrich G,  Kerb R;
XX
DR   WPI; 2003-354397/33.
XX
PT   Use of irinotecan or its derivative for preparation of a pharmaceutical
PT   composition for treating cancer in a subject having a genome with a
PT   variant allele comprising a multidrug resistance protein 1
PT   polynucleotide.
XX
PS   Disclosure; Page 51; 100pp; English.
XX
CC   The present invention describes a method for the use of irinotecan (I) or
CC   its derivative for the preparation of a pharmaceutical composition for
CC   treating colorectal, cervical, gastric, lung, ovarian or pancreatic
CC   cancer, or malignant glioma in a subject having a genome with a variant
CC   allele which comprises a multidrug resistance protein 1 (MRP1)
CC   polynucleotide (II). (I) has cytostatic activity. (I) or its derivative
CC   can be used for the preparation of a pharmaceutical composition for
CC   treating colorectal, cervical, gastric, lung, ovarian or pancreatic
CC   cancer, or malignant glioma in a subject, where the subject is a human
CC   (preferably African or Asian) or a mouse. The present sequence represents
CC   a sequence which is used in the exemplification of the present invention.
XX
SQ   Sequence 17 BP; 5 A; 4 C; 3 G; 5 T; 0 U; 0 Other;

  Query Match             1.6%;  Score 14.4;  DB 1;  Length 17;
  Best Local Similarity   93.8%;  Pred. No. 1.5e+02;
  Matches   15;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        321 GCAATGTGACTGCTGA 336
              ||||||| ||||||||
Db         16 GCAATGTAACTGCTGA 1


RESULT 185
ADB21196
ID   ADB21196 standard; DNA; 17 BP.
XX
AC   ADB21196;
XX
DT   20-NOV-2003  (first entry)
XX
DE   MRP1 based cancer related nucleic acid SEQ ID NO:354.
XX
KW   irinotecan; colorectal cancer; cervical cancer; gastric cancer;
KW   lung cancer; ovarian cancer; pancreatic cancer; malignant glioma;
KW   variant allele; multidrug resistance protein 1; MRP1; cytostatic; gene;
KW   ds.
XX
OS   Unidentified.
XX
PN   WO2003013533-A2.
XX
```

PD 20-FEB-2003.
XX
PF 23-JUL-2002; 2002WO-EP008200.
XX
PR 23-JUL-2001; 2001EP-00117608.
PR 24-MAY-2002; 2002EP-00011710.
XX
PA (EPID-) EPIDAUROS BIOTECHNOLOGIE AG.
XX
PI Heinrich G, Kerb R;
XX
DR WPI; 2003-354397/33.
XX
PT Use of irinotecan or its derivative for preparation of a pharmaceutical
PT composition for treating cancer in a subject having a genome with a
PT variant allele comprising a multidrug resistance protein 1
PT polynucleotide.
XX
PS Disclosure; Page 51; 100pp; English.
XX
CC The present invention describes a method for the use of irinotecan (I) or
CC its derivative for the preparation of a pharmaceutical composition for
CC treating colorectal, cervical, gastric, lung, ovarian or pancreatic
CC cancer, or malignant glioma in a subject having a genome with a variant
CC allele which comprises a multidrug resistance protein 1 (MRP1)
CC polynucleotide (II). (I) has cytostatic activity. (I) or its derivative
CC can be used for the preparation of a pharmaceutical composition for
CC treating colorectal, cervical, gastric, lung, ovarian or pancreatic
CC cancer, or malignant glioma in a subject, where the subject is a human
CC (preferably African or Asian) or a mouse. The present sequence represents
CC a sequence which is used in the exemplification of the present invention.
XX
SQ Sequence 17 BP; 5 A; 3 C; 4 G; 5 T; 0 U; 0 Other;

Query Match 1.6%; Score 14.4; DB 1; Length 17;
Best Local Similarity 93.8%; Pred. No. 1.5e+02;
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 321 GCAATGTGACTGCTGA 336
||||||| ||||||||
Db 2 GCAATGTAACTGCTGA 17

RESULT 186
ADB88285
ID ADB88285 standard; DNA; 17 BP.
XX
AC ADB88285;
XX
DT 04-DEC-2003 (first entry)
XX
DE Human UGT1A1 variant allele sequence fragment SEQ ID NO:326.
XX
KW ss; irinotecan; cancer; UGT1A1; cytostatic; topoisomerase I inhibitor;
KW colorectal cancer; cervical cancer; gastric cancer; lung cancer;
KW ovarian cancer; pancreatic cancer; malignant glioma;
KW uridine diphosphate glycosyltransferase1 member A1.
XX
OS Homo sapiens.
XX
PN WO2003013536-A2.
XX
PD 20-FEB-2003.
XX
PF 23-JUL-2002; 2002WO-EP008217.
XX
PR 23-JUL-2001; 2001EP-00117608.
PR 24-MAY-2002; 2002EP-00011710.
XX
PA (EPID-) EPIDAUROS BIOTECHNOLOGIE AG.
XX
PI Heinrich G, Kerb R;
XX
DR WPI; 2003-289896/28.
XX
PT Use of irinotecan to treat cancer patient by determining if patient has
PT variant alleles of UGT1A1 gene, administering increased/decreased amounts
PT of irinotecan based on increased/decreased levels of UGT1A1 gene product.
XX
PS Disclosure; Page 55; 107pp; English.
XX
CC The invention relates to the novel use of irinotecan to treat a patient
CC suffering from cancer. This involves determining if the patient has one
CC or more variant alleles of the UGT1A1 gene, and if the patient has one or
CC more of such variant alleles, irinotecan is administered in an increased
CC or decreased amount in comparison to the amount that is administered
CC without regard to the patient's alleles in the UGT1A1 gene. The invention
CC has cytostatic activity. A composition of the invention acts as a
CC topoisomerase I inhibitor. The method is useful for treating a patient,
CC an animal e.g. mouse or a human, preferably African or Asian, suffering
CC from cancer such as colorectal, cervical, gastric cancer, lung, ovarian,
CC pancreatic cancer or malignant glioma. The present sequence is udes in
CC the exemplification of the invention.
XX
SQ Sequence 17 BP; 5 A; 3 C; 4 G; 5 T; 0 U; 0 Other;

Query Match 1.6%; Score 14.4; DB 1; Length 17;
Best Local Similarity 93.8%; Pred. No. 1.5e+02;
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 321 GCAATGTGACTGCTGA 336
||||||| ||||||||
Db 2 GCAATGTAACTGCTGA 17

RESULT 187
ADB88284/c
ID ADB88284 standard; DNA; 17 BP.
XX
AC ADB88284;
XX
DT 04-DEC-2003 (first entry)
XX
DE Human UGT1A1 variant allele sequence fragment SEQ ID NO:325.
XX
KW ss; irinotecan; cancer; UGT1A1; cytostatic; topoisomerase I inhibitor;
KW colorectal cancer; cervical cancer; gastric cancer; lung cancer;
KW ovarian cancer; pancreatic cancer; malignant glioma;
KW uridine diphosphate glycosyltransferase1 member A1.
XX
OS Homo sapiens.
XX
PN WO2003013536-A2.
XX
PD 20-FEB-2003.
XX
PF 23-JUL-2002; 2002WO-EP008217.
XX
PR 23-JUL-2001; 2001EP-00117608.
PR 24-MAY-2002; 2002EP-00011710.
XX
PA (EPID-) EPIDAUROS BIOTECHNOLOGIE AG.
XX
PI Heinrich G, Kerb R;
XX
DR WPI; 2003-289896/28.
XX
PT Use of irinotecan to treat cancer patient by determining if patient has
PT variant alleles of UGT1A1 gene, administering increased/decreased amounts
PT of irinotecan based on increased/decreased levels of UGT1A1 gene product.
XX
PS Disclosure; Page 55; 107pp; English.
XX
CC The invention relates to the novel use of irinotecan to treat a patient
CC suffering from cancer. This involves determining if the patient has one
CC or more variant alleles of the UGT1A1 gene, and if the patient has one or

```
CC   more of such variant alleles, irinotecan is administered in an increased
CC   or decreased amount in comparison to the amount that is administered
CC   without regard to the patient's alleles in the UGT1A1 gene. The invention
CC   has cytostatic activity. A composition of the invention acts as a
CC   topoisomerase I inhibitor. The method is useful for treating a patient,
CC   an animal e.g. mouse or a human, preferably African or Asian, suffering
CC   from cancer such as colorectal, cervical, gastric cancer, lung, ovarian,
CC   pancreatic cancer or malignant glioma. The present sequence is udes in
CC   the exemplification of the invention.
XX
SQ   Sequence 17 BP; 5 A; 4 C; 3 G; 5 T; 0 U; 0 Other;

  Query Match             1.6%;  Score 14.4;  DB 1;  Length 17;
  Best Local Similarity   93.8%;  Pred. No. 1.5e+02;
  Matches   15;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        321 GCAATGTGACTGCTGA 336
              ||||||| ||||||||
Db         16 GCAATGTAACTGCTGA 1


RESULT 188
ADB97267/c
ID   ADB97267 standard; DNA; 17 BP.
XX
AC   ADB97267;
XX
DT   04-DEC-2003  (first entry)
XX
DE   Human MDR1 variant allele sequence fragment SEQ ID NO:353.
XX
KW   irinotecan; colorectal cancer; cervical cancer; gastric cancer;
KW   lung cancer; ovarian cancer; pancreatic cancer; malignant glioma;
KW   multidrug resistance 1; MDR1; cytostatic; human; ds; Cyp3A5; MRP1; MDR1;
KW   TOP1.
XX
OS   Homo sapiens.
XX
PN   WO2003013537-A2.
XX
PD   20-FEB-2003.
XX
PF   23-JUL-2002; 2002WO-EP008218.
XX
PR   23-JUL-2001; 2001EP-00117608.
PR   24-MAY-2002; 2002EP-00011710.
XX
PA   (EPID-) EPIDAUROS BIOTECHNOLOGIE AG.
XX
PI   Heinrich G,  Kerb R;
XX
DR   WPI; 2003-268145/26.
XX
PT   New use of irinotecan for preparation of pharmaceutical compositions for
PT   treating cancer in subject having genome with variant allele comprising
PT   multidrug resistance 1 polynucleotide.
XX
PS   Claim 1; Page 79; 130pp; English.
XX
CC   The invention relates to the novel use of irinotecan or its derivative
CC   for the preparation of pharmaceutical compositions for treating
CC   colorectal, cervical, gastric, lung, ovarian or pancreatic cancer, or
CC   malignant glioma in a subject having a genome with a variant allele which
CC   comprises a multidrug resistance 1 (MDR1) polynucleotide. A composition
CC   of the invention has cytostatic activity. The invention is useful for the
CC   preparation of pharmaceutical compositions for treating colorectal,
CC   cervical, gastric, lung, ovarian or pancreatic cancer, or malignant
CC   glioma in a subject (preferably human, more preferably African or Asian)
CC   or a mouse. The present sequence is used in the exemplification of the
CC   invention.
XX
SQ   Sequence 17 BP; 5 A; 4 C; 3 G; 5 T; 0 U; 0 Other;

  Query Match             1.6%;  Score 14.4;  DB 1;  Length 17;
  Best Local Similarity   93.8%;  Pred. No. 1.5e+02;
  Matches   15;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        321 GCAATGTGACTGCTGA 336
              ||||||| ||||||||
Db         16 GCAATGTAACTGCTGA 1


RESULT 189
ADB97268
ID   ADB97268 standard; DNA; 17 BP.
XX
AC   ADB97268;
XX
DT   04-DEC-2003  (first entry)
XX
DE   Human MDR1 variant allele sequence fragment SEQ ID NO:354.
XX
KW   irinotecan; colorectal cancer; cervical cancer; gastric cancer;
KW   lung cancer; ovarian cancer; pancreatic cancer; malignant glioma;
KW   multidrug resistance 1; MDR1; cytostatic; human; ds; Cyp3A5; MRP1; MDR1;
KW   TOP1.
XX
OS   Homo sapiens.
XX
PN   WO2003013537-A2.
XX
PD   20-FEB-2003.
XX
PF   23-JUL-2002; 2002WO-EP008218.
XX
PR   23-JUL-2001; 2001EP-00117608.
PR   24-MAY-2002; 2002EP-00011710.
XX
PA   (EPID-) EPIDAUROS BIOTECHNOLOGIE AG.
XX
PI   Heinrich G,  Kerb R;
XX
DR   WPI; 2003-268145/26.
XX
PT   New use of irinotecan for preparation of pharmaceutical compositions for
PT   treating cancer in subject having genome with variant allele comprising
PT   multidrug resistance 1 polynucleotide.
XX
PS   Claim 1; Page 79; 130pp; English.
XX
CC   The invention relates to the novel use of irinotecan or its derivative
CC   for the preparation of pharmaceutical compositions for treating
CC   colorectal, cervical, gastric, lung, ovarian or pancreatic cancer, or
CC   malignant glioma in a subject having a genome with a variant allele which
CC   comprises a multidrug resistance 1 (MDR1) polynucleotide. A composition
CC   of the invention has cytostatic activity. The invention is useful for the
CC   preparation of pharmaceutical compositions for treating colorectal,
CC   cervical, gastric, lung, ovarian or pancreatic cancer, or malignant
CC   glioma in a subject (preferably human, more preferably African or Asian)
CC   or a mouse. The present sequence is used in the exemplification of the
CC   invention.
XX
SQ   Sequence 17 BP; 5 A; 3 C; 4 G; 5 T; 0 U; 0 Other;

  Query Match             1.6%;  Score 14.4;  DB 1;  Length 17;
  Best Local Similarity   93.8%;  Pred. No. 1.5e+02;
  Matches   15;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        321 GCAATGTGACTGCTGA 336
              ||||||| ||||||||
Db          2 GCAATGTAACTGCTGA 17


RESULT 190
ADB92459
ID   ADB92459 standard; DNA; 17 BP.
```

XX
AC ADB92459;
XX
DT 04-DEC-2003 (first entry)
XX
DE Human MDR1 variant allele sequence fragment SEQ ID NO:354.
XX
KW irinotecan; colorectal cancer; cervical cancer; gastric cancer;
KW lung cancer; ovarian cancer; pancreatic cancer; malignant glioma;
KW multidrug resistance 1; MDR1; cytostatic; ds; human; UGT1A1; MRP1; TOP1.
XX
OS Homo sapiens.
XX
PN WO2003013535-A2.
XX
PD 20-FEB-2003.
XX
PF 23-JUL-2002; 2002WO-EP008220.
XX
PR 23-JUL-2001; 2001EP-00117608.
PR 24-MAY-2002; 2002EP-00011710.
XX
PA (EPID-) EPIDAUROS BIOTECHNOLOGIE AG.
XX
PI Heinrich G, Kerb R;
XX
DR WPI; 2003-342400/32.
XX
PT New use of irinotecan for preparation of pharmaceutical compositions for
PT treating cancer in subject having genome with variant allele comprising
PT multidrug resistance 1 polynucleotide.
XX
PS Claim 8; Page 50; 104pp; English.
XX
CC The invention relates ro a novel use of irinotecan or its derivative for
CC the preparation of a pharmaceutical composition for treating colorectal,
CC cervical, gastric, lung, ovarian or pancreatic cancer, or malignant
CC glioma in a subject having a genome with a variant allele which comprises
CC a multidrug resistance 1 (MDR1) polynucleotide. A composition of the
CC invention has cytostatic activity. The present sequence is used in the
CC exemplification of the invention.
XX
SQ Sequence 17 BP; 5 A; 3 C; 4 G; 5 T; 0 U; 0 Other;

Query Match 1.6%; Score 14.4; DB 1; Length 17;
Best Local Similarity 93.8%; Pred. No. 1.5e+02;
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 321 GCAATGTGACTGCTGA 336
||||||| ||||||||
Db 2 GCAATGTAACTGCTGA 17

RESULT 191
ADB92458/c
ID ADB92458 standard; DNA; 17 BP.
XX
AC ADB92458;
XX
DT 04-DEC-2003 (first entry)
XX
DE Human MDR1 variant allele sequence fragment SEQ ID NO:353.
XX
KW irinotecan; colorectal cancer; cervical cancer; gastric cancer;
KW lung cancer; ovarian cancer; pancreatic cancer; malignant glioma;
KW multidrug resistance 1; MDR1; cytostatic; ds; human; UGT1A1; MRP1; TOP1.
XX
OS Homo sapiens.
XX
PN WO2003013535-A2.
XX
PD 20-FEB-2003.
XX
PF 23-JUL-2002; 2002WO-EP008220.
XX
PR 23-JUL-2001; 2001EP-00117608.
PR 24-MAY-2002; 2002EP-00011710.
XX
PA (EPID-) EPIDAUROS BIOTECHNOLOGIE AG.
XX
PI Heinrich G, Kerb R;
XX
DR WPI; 2003-342400/32.
XX
PT New use of irinotecan for preparation of pharmaceutical compositions for
PT treating cancer in subject having genome with variant allele comprising
PT multidrug resistance 1 polynucleotide.
XX
PS Claim 8; Page 50; 104pp; English.
XX
CC The invention relates ro a novel use of irinotecan or its derivative for
CC the preparation of a pharmaceutical composition for treating colorectal,
CC cervical, gastric, lung, ovarian or pancreatic cancer, or malignant
CC glioma in a subject having a genome with a variant allele which comprises
CC a multidrug resistance 1 (MDR1) polynucleotide. A composition of the
CC invention has cytostatic activity. The present sequence is used in the
CC exemplification of the invention.
XX
SQ Sequence 17 BP; 5 A; 4 C; 3 G; 5 T; 0 U; 0 Other;

Query Match 1.6%; Score 14.4; DB 1; Length 17;
Best Local Similarity 93.8%; Pred. No. 1.5e+02;
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 321 GCAATGTGACTGCTGA 336
||||||| ||||||||
Db 16 GCAATGTAACTGCTGA 1

RESULT 192
ADB44992
ID ADB44992 standard; DNA; 17 BP.
XX
AC ADB44992;
XX
DT 18-DEC-2003 (first entry)
XX
DE Tumour suppression/reversion associated nucleotide #5315.
XX
KW cytostatic; antiviral; neuroprotective; nootropic; neuroleptic; ss;
KW primer; probe; tumour suppression; tumour reversion; apoptosis;
KW virus resistance; transgenic animals; Alzheimer's disease; schizophrenia;
KW diagnosis.
XX
OS Homo sapiens.
XX
PN WO2003040369-A2.
XX
PD 15-MAY-2003.
XX
PF 17-SEP-2002; 2002WO-IB004219.
XX
PR 17-SEP-2001; 2001FR-00011981.
XX
PA (MOLE-) MOLECULAR ENGINES LAB.
XX
PI Telerman A, Amson R, Tuijnder M;
XX
DR WPI; 2003-441574/41.
XX
PT New nucleic acid encoding human prostate membrane-specific antigen,
PT useful e.g. for treatment of tumors and viral infection, also related
PT polypeptide and antibodies.
XX
PS Disclosure; Page 653; 771pp; French.
XX

CC The invention relates to the isolation of 6327 nucleotide sequences,
CC fragments of at least 15 consecutive nucleotides of these nucleotides, a
CC sequence having at least 80% identity, after optimal alignment, with the
CC nucleotides, a sequence that hybridizes under stringent conditions with
CC the nucleotides, or the complement, or corresponding RNA, of the
CC nucleotides. The nucleotides are used as probes or primers for detecting,
CC identifying, quantifying and/or amplifying nucleic acids, as in vitro
CC sense and antisense sequences, of nucleotides involved in tumour
CC suppression or reversion, apoptosis and or viral resistance, to produce
CC recombinant polypeptides, and to prepare transgenic animals, as
CC experimental models. The nucleotides (also vectors containing them and
CC cells containing the vectors), the encoded polypeptides and antibodies
CC (Ab) against the polypeptide are useful for prevention and/or treatment
CC of viral infections or diseases characterized by development of tumours
CC or cell degeneration (e.g. Alzheimer's disease or schizophrenia).
CC Analysis of the expression of the nucleotides can be used for diagnosis
CC and/or prognosis of these diseases. The nucleotides and polypeptides can
CC also be used to screen for their specific interactive molecules,
CC potentially useful for treating diseases associated with abnormal
CC expression of the nucleotides.
XX
SQ Sequence 17 BP; 6 A; 1 C; 3 G; 7 T; 0 U; 0 Other;

```
  Query Match             1.6%;  Score 14.4;  DB 1;  Length 17;
  Best Local Similarity   93.8%;  Pred. No. 1.5e+02;
  Matches   15;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        620 ATCTTAAAAGTGTAAT 635
              ||||||||||||| ||
Db          2 ATCTTAAAAGTGTTAT 17
```

RESULT 193
ADI48262
ID ADI48262 standard; DNA; 17 BP.
XX
AC ADI48262;
XX
DT 15-APR-2004 (first entry)
XX
DE Human tumour suppression/reversion-related DNA sequence SeqID765.
XX
KW tumour suppression; tumour reversion; apoptosis; virus resistance;
KW cytostatic; virucide; neuroprotective; nootropic; neuroleptic; probe;
KW primer; PCR; gene chip; antisense; viral disease; tumour;
KW cell degeneration; cancer; Alzheimer's disease; schizophrenia; ds; human.
XX
OS Homo sapiens.
XX
PN WO2003025177-A2.
XX
PD 27-MAR-2003.
XX
PF 17-SEP-2002; 2002WO-IB004523.
XX
PR 17-SEP-2001; 2001FR-00011980.
XX
PA (MOLE-) MOLECULAR ENGINES LAB.
XX
PI Telerman A, Amson R, Tuijnder M;
XX
DR WPI; 2003-313354/30.
XX
PT New isolated nucleic acid, useful for treating viral diseases associated
PT with tumors and cell degeneration, also related polypeptides, antibodies
PT and transfected cells.
XX
PS Disclosure; SEQ ID NO 765; 30pp; French.
XX
CC This invention relates to novel isolated nucleic acid sequences involved
CC in the phenomena of tumour suppression, tumour reversion, apoptosis
CC and/or resistance to viruses. The invention may be useful for the
CC development of compounds with a cytostatic, virucide, neuroprotective,
CC nootropic or neuroleptic activity. The DNA sequences may be useful as
CC probes and primers for detecting, indentifying, quantifying and/or
CC amplifying nucleic acid, for example as one component of a gene chip, in
CC vitro as antisense reagents and for production of recombinant
CC polypeptides. The invention may therefore be useful for preparation of
CC pharmaceuticals for prevention and/or treatment of viral diseases that
CC are characterised by development of tumours or cell degeneration,
CC specifically cancer but also Alzheimer's disease and schizophrenia. The
CC present sequence is that of a nucleic acid sequence of the invention.
CC Note: The sequence data for this patent did not form part of the printed
CC specification, but was obtained in electronic format directly from WIPO
CC at ftp.wipo.int/pub/publishedpct_sequences
XX
SQ Sequence 17 BP; 7 A; 4 C; 2 G; 4 T; 0 U; 0 Other;

```
  Query Match             1.6%;  Score 14.4;  DB 1;  Length 17;
  Best Local Similarity   93.8%;  Pred. No. 1.5e+02;
  Matches   15;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        261 ATCCTCTATCCAGAAA 276
              ||||| ||||||||||
Db          2 ATCCTATATCCAGAAA 17
```

RESULT 194
ABZ76052/c
ID ABZ76052 standard; DNA; 17 BP.
XX
AC ABZ76052;
XX
DT 29-MAY-2003 (first entry)
XX
DE Antigene inhibiting mammalian cruciform formation.
XX
KW Cruciform; DNA replication; antigene; antibacterial; virucide; fungicide;
KW protozoazide; antihelminthic; anti-HIV; cytostatic; gene therapy; ds.
XX
OS Synthetic.
XX
PN WO2003012097-A2.
XX
PD 13-FEB-2003.
XX
PF 30-JUL-2002; 2002WO-IB003667.
XX
PR 30-JUL-2001; 2001US-0308636P.
XX
PA (PRIC/) PRICE G B.
PA (ZANN/) ZANNIS-HADJOPOULOS M.
XX
PI Price GB, Zannis-Hadjopoulos M;
XX
DR WPI; 2003-248179/24.
XX
PT Inhibiting DNA replication or cell proliferation, useful for treating
PT tumors, comprises contacting a DNA molecule with a nucleic acid antigene
PT that specifically hybridizes to a portion of the DNA molecule having dyad
PT symmetry.
XX
PS Claim 11; Page 16; 54pp; English.
XX
CC The invention relates to inhibiting DNA replication and involves
CC contacting a DNA molecule with a nucleic acid antigene comprising at
CC least 12 nucleobases selected from natural nucleobases, modified
CC nucleobases, and their mixture. The antigene specifically hybridizes to a
CC portion of the DNA molecule having dyad symmetry. The method is useful in
CC inhibiting DNA replication and, thus, inhibiting the growth of bacteria,
CC virus (e.g. HIV), fungi, protozoa, helminths and insects. The method is
CC also useful in inhibiting cell proliferation of tumour cells. The present
CC sequence represents an antigene inhibiting the cruciform formation of
CC mammalian replication origin
XX
SQ Sequence 17 BP; 2 A; 7 C; 0 G; 8 T; 0 U; 0 Other;

```
  Query Match             1.6%;  Score 14.4;  DB 1;  Length 17;
  Best Local Similarity   93.8%;  Pred. No. 1.5e+02;
  Matches   15;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        453 GTGGAAATGAAGAAAG 468
              ||||| ||||||||||
Db         16 GTGGAGATGAAGAAAG 1


RESULT 195
ADK00139/c
ID   ADK00139 standard; DNA; 18 BP.
XX
AC   ADK00139;
XX
DT   20-MAY-2004  (first entry)
XX
DE   Primer of the invention #8.
XX
KW   murine genomic region; cancer; Antiinflammatory; Cytostatic;
KW   diagnostic reagent; inflammatory disease; acute myeloid leukemia; ss;
KW   primer.
XX
OS   Synthetic.
XX
PN   WO2004016317-A1.
XX
PD   26-FEB-2004.
XX
PF   14-AUG-2003; 2003WO-NL000583.
XX
PR   14-AUG-2002; 2002EP-00078358.
PR   19-SEP-2002; 2002US-00252132.
XX
PA   (UYRO-) UNIV ROTTERDAM ERASMUS CENT MEDICAL.
XX
PI   Touw IP,  Delwel HR,  Lowenberg B,  Valk PJM;
XX
DR   WPI; 2004-203739/19.
XX
PT   Use of a murine genomic region involved in the development of cancer for
PT   identifying compounds useful for treating or diagnosing cancer or
PT   inflammatory diseases.
XX
PS   Example 1; SEQ ID NO 8; 106pp; English.
XX
CC   The present invention relates to the use of at least one murine genomic
CC   region involved in the development of cancer selected from a set of
CC   genomic regions listed in the specification for preparing a polypeptide
CC   encoded by the region or for the preparation of an inhibitor able to
CC   inhibit the transcription product or activity of a polypeptide encoded by
CC   the region, or affected by transformations in the region. The murine
CC   genomic region involved in the development of cancer or its human
CC   homologue or transcription product is useful for preparing its encoded
CC   polypeptide or inhibitor for preparing a diagnostic reagent for
CC   diagnosing cancer or for preparing a composition for treating
CC   inflammatory diseases or cancer, e.g., acute myeloid leukemia. The
CC   present sequence represents a primer of the invention.
XX
SQ   Sequence 18 BP; 3 A; 4 C; 5 G; 6 T; 0 U; 0 Other;

  Query Match             1.6%;  Score 14.4;  DB 1;  Length 18;
  Best Local Similarity   93.8%;  Pred. No. 1.6e+02;
  Matches   15;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        380 TCACTCTCAGGAGACC 395
              ||||||| ||||||||
Db         16 TCACTCTGAGGAGACC 1


RESULT 196
AAT81501
ID   AAT81501 standard; RNA; 17 BP.
XX
AC   AAT81501;
XX
DT   14-DEC-1997  (first entry)
XX
DE   Human c-myb hammerhead ribozyme target sequence (nt. position 2701).
XX
KW   Enzymatic nucleic acid; hammerhead; ribozyme; cleavage; human;
KW   smooth muscle cell; hyperproliferation; restenosis; cancer; c-myb;
KW   coronary angioplasty; ss.
XX
OS   Homo sapiens.
XX
PN   WO9531541-A2.
XX
PD   23-NOV-1995.
XX
PF   18-MAY-1995;   95WO-US006368.
XX
PR   18-MAY-1994;   94US-00245466.
PR   13-JAN-1995;   95US-00373124.
XX
PA   (RIBO-) RIBOZYME PHARM INC.
XX
PI   Stinchcomb DT,  Draper K,  Mcswiggen J,  Jarvis T;
XX
DR   WPI; 1996-010927/01.
XX
PT   New enzymatic nucleic acid molecules - cleave RNA produced by e.g. c-myb,
PT   for treating restenosis or cancer.
XX
PS   Claim 1; Page 76; 128pp; English.
XX
CC   The present sequence represents the preferred target sequence for an
CC   enzymatic nucleic acid, especially a hammerhead ribozyme, which cleaves
CC   the human c-myb sequence at the base position indicated in the descriptor
CC   line. The c-myb sequence was screened for optimal ribozyme target sites
CC   using a computer folding algorithm, and regions of the mRNA which did not
CC   form secondary folding structures and contained potential ribozyme
CC   cleavage sites were identified. Ribozymes were synthesised and their
CC   activities optimised by either varying the length of the binding arms or
CC   by modification to prevent degradation by nucleases. The ribozymes cleave
CC   the c-myb sequence and can be used to prevent smooth muscle cell
CC   hyperproliferation in restenosis, especially after coronary angioplasty,
CC   and in cancers
XX
SQ   Sequence 17 BP; 10 A; 0 C; 1 G; 0 T; 6 U; 0 Other;

  Query Match             1.6%;  Score 14;  DB 1;  Length 17;
  Best Local Similarity   57.1%;  Pred. No. 1.6e+02;
  Matches    8;  Conservative    6;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        709 ATAGTTTTATAAAA 722
              |:||::::|:||||
Db          3 AUAGUUUUAUAAAA 16


RESULT 197
AAT81503
ID   AAT81503 standard; RNA; 17 BP.
XX
AC   AAT81503;
XX
DT   14-DEC-1997  (first entry)
XX
DE   Human c-myb hammerhead ribozyme target sequence (nt. position 2703).
XX
KW   Enzymatic nucleic acid; hammerhead; ribozyme; cleavage; human;
KW   smooth muscle cell; hyperproliferation; restenosis; cancer; c-myb;
KW   coronary angioplasty; ss.
XX
OS   Homo sapiens.
```

```
XX
PN   WO9531541-A2.
XX
PD   23-NOV-1995.
XX
PF   18-MAY-1995;   95WO-US006368.
XX
PR   18-MAY-1994;   94US-00245466.
PR   13-JAN-1995;   95US-00373124.
XX
PA   (RIBO-) RIBOZYME PHARM INC.
XX
PI   Stinchcomb DT,  Draper K,  Mcswiggen J,  Jarvis T;
XX
DR   WPI; 1996-010927/01.
XX
PT   New enzymatic nucleic acid molecules - cleave RNA produced by e.g. c-myb,
PT   for treating restenosis or cancer.
XX
PS   Claim 1; Page 76; 128pp; English.
XX
CC   The present sequence represents the preferred target sequence for an
CC   enzymatic nucleic acid, especially a hammerhead ribozyme, which cleaves
CC   the human c-myb sequence at the base position indicated in the descriptor
CC   line. The c-myb sequence was screened for optimal ribozyme target sites
CC   using a computer folding algorithm, and regions of the mRNA which did not
CC   form secondary folding structures and contained potential ribozyme
CC   cleavage sites were identified. Ribozymes were synthesised and their
CC   activities optimised by either varying the length of the binding arms or
CC   by modification to prevent degradation by nucleases. The ribozymes cleave
CC   the c-myb sequence and can be used to prevent smooth muscle cell
CC   hyperproliferation in restenosis, especially after coronary angioplasty,
CC   and in cancers
XX
SQ   Sequence 17 BP; 9 A; 0 C; 1 G; 0 T; 7 U; 0 Other;

  Query Match             1.6%;  Score 14;  DB 1;  Length 17;
  Best Local Similarity   57.1%;  Pred. No. 1.6e+02;
  Matches    8;  Conservative    6;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        709 ATAGTTTTATAAAA 722
              |:||::::|:||||
Db          1 AUAGUUUUAUAAAA 14


RESULT 198
AAT81500
ID   AAT81500 standard; RNA; 17 BP.
XX
AC   AAT81500;
XX
DT   14-DEC-1997  (first entry)
XX
DE   Human c-myb hammerhead ribozyme target sequence (nt. position 2700).
XX
KW   Enzymatic nucleic acid; hammerhead; ribozyme; cleavage; human;
KW   smooth muscle cell; hyperproliferation; restenosis; cancer; c-myb;
KW   coronary angioplasty; ss.
XX
OS   Homo sapiens.
XX
PN   WO9531541-A2.
XX
PD   23-NOV-1995.
XX
PF   18-MAY-1995;   95WO-US006368.
XX
PR   18-MAY-1994;   94US-00245466.
PR   13-JAN-1995;   95US-00373124.
XX
PA   (RIBO-) RIBOZYME PHARM INC.
XX
PI   Stinchcomb DT,  Draper K,  Mcswiggen J,  Jarvis T;
XX
DR   WPI; 1996-010927/01.
XX
PT   New enzymatic nucleic acid molecules - cleave RNA produced by e.g. c-myb,
PT   for treating restenosis or cancer.
XX
PS   Claim 1; Page 76; 128pp; English.
XX
CC   The present sequence represents the preferred target sequence for an
CC   enzymatic nucleic acid, especially a hammerhead ribozyme, which cleaves
CC   the human c-myb sequence at the base position indicated in the descriptor
CC   line. The c-myb sequence was screened for optimal ribozyme target sites
CC   using a computer folding algorithm, and regions of the mRNA which did not
CC   form secondary folding structures and contained potential ribozyme
CC   cleavage sites were identified. Ribozymes were synthesised and their
CC   activities optimised by either varying the length of the binding arms or
CC   by modification to prevent degradation by nucleases. The ribozymes cleave
CC   the c-myb sequence and can be used to prevent smooth muscle cell
CC   hyperproliferation in restenosis, especially after coronary angioplasty,
CC   and in cancers
XX
SQ   Sequence 17 BP; 9 A; 0 C; 2 G; 0 T; 6 U; 0 Other;

  Query Match             1.6%;  Score 14;  DB 1;  Length 17;
  Best Local Similarity   57.1%;  Pred. No. 1.6e+02;
  Matches    8;  Conservative    6;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        709 ATAGTTTTATAAAA 722
              |:||::::|:||||
Db          4 AUAGUUUUAUAAAA 17


RESULT 199
AAT81502
ID   AAT81502 standard; RNA; 17 BP.
XX
AC   AAT81502;
XX
DT   14-DEC-1997  (first entry)
XX
DE   Human c-myb hammerhead ribozyme target sequence (nt. position 2702).
XX
KW   Enzymatic nucleic acid; hammerhead; ribozyme; cleavage; human;
KW   smooth muscle cell; hyperproliferation; restenosis; cancer; c-myb;
KW   coronary angioplasty; ss.
XX
OS   Homo sapiens.
XX
PN   WO9531541-A2.
XX
PD   23-NOV-1995.
XX
PF   18-MAY-1995;   95WO-US006368.
XX
PR   18-MAY-1994;   94US-00245466.
PR   13-JAN-1995;   95US-00373124.
XX
PA   (RIBO-) RIBOZYME PHARM INC.
XX
PI   Stinchcomb DT,  Draper K,  Mcswiggen J,  Jarvis T;
XX
DR   WPI; 1996-010927/01.
XX
PT   New enzymatic nucleic acid molecules - cleave RNA produced by e.g. c-myb,
PT   for treating restenosis or cancer.
XX
PS   Claim 1; Page 76; 128pp; English.
XX
CC   The present sequence represents the preferred target sequence for an
CC   enzymatic nucleic acid, especially a hammerhead ribozyme, which cleaves
CC   the human c-myb sequence at the base position indicated in the descriptor
CC   line. The c-myb sequence was screened for optimal ribozyme target sites
CC   using a computer folding algorithm, and regions of the mRNA which did not
```

CC form secondary folding structures and contained potential ribozyme
CC cleavage sites were identified. Ribozymes were synthesised and their
CC activities optimised by either varying the length of the binding arms or
CC by modification to prevent degradation by nucleases. The ribozymes cleave
CC the c-myb sequence and can be used to prevent smooth muscle cell
CC hyperproliferation in restenosis, especially after coronary angioplasty,
CC and in cancers
XX
SQ Sequence 17 BP; 10 A; 0 C; 1 G; 0 T; 6 U; 0 Other;

Query Match 1.6%; Score 14; DB 1; Length 17;
Best Local Similarity 57.1%; Pred. No. 1.6e+02;
Matches 8; Conservative 6; Mismatches 0; Indels 0; Gaps 0;

Qy 709 ATAGTTTTATAAAA 722
|:||:::|:||||
Db 2 AUAGUUUUAUAAAA 15

RESULT 200
ABK01349/c
ID ABK01349 standard; RNA; 17 BP.
XX
AC ABK01349;
XX
DT 12-MAR-2002 (first entry)
XX
DE Human NOGO Inozyme #619.
XX
KW Human; ss; antisense therapy; cytostatic; antiinflammatory; haemostatic;
KW cerebroprotective; nootropic; neuroprotective; antiparkinsonian;
KW muscular; CD20; neurite growth inhibitor gene; NOGO; hammerhead ribozyme;
KW DNAzyme; inozyme; G-cleaver; amberzyme; zinzyme; lymphoma; leukaemia;
KW B-cell lymphoma; non-Hodgkin's lymphoma; NHL; lymphocytic leukaemia;
KW human immunodeficiency virus; HIV associated NHL; mantle-cell lymphoma;
KW MCL; immunocytoma; IMC; immune thrombocytopaenia; stroke; dementia;
KW inflammatory arthropathy; central nervous system injury;
KW cerebrovascular accident; CVA; Alzheimer's disease; multiple sclerosis;
KW chemotherapy-induced neuropathy; amyotrophic lateral sclerosis; ALS;
KW Parkinson's disease; ataxia; Huntington's disease;
KW Creutzfeldt-Jakob disease; muscular dystrophy; neurodegenerative disease.
XX
OS Homo sapiens.
OS Synthetic.
XX
PN WO200159103-A2.
XX
PD 16-AUG-2001.
XX
PF 09-FEB-2001; 2001WO-US004273.
XX
PR 11-FEB-2000; 2000US-0181797P.
PR 28-FEB-2000; 2000US-0185516P.
PR 06-MAR-2000; 2000US-0187128P.
XX
PA (RIBO-) RIBOZYME PHARM INC.
PA (BLAT/) BLATT L.
PA (MCSW/) MCSWIGGEN J.
PA (CHOW/) CHOWRIRA B M.
XX
PI Blatt L, Mcswiggen J, Chowrira BM;
XX
DR WPI; 2001-607195/69.
XX
PT Nucleic acid molecules, e.g., enzymatic nucleic acids and antisense
PT constructs, which down regulate expression of a CD20 gene or neurite
PT growth inhibitor gene useful for treating, e.g., lymphoma, leukemia, and
PT central nervous system injury.
XX
PS Claim 88; Page 87; 200pp; English.
XX
CC The invention relates to a nucleic acid molecule which down regulates
CC expression of a CD20 gene and a nucleic acid molecule which down
CC regulates expression of a neurite growth inhibitor gene (NOGO). The
CC nucleic acids may be enzymatic nucleic acids (e.g. a ribozyme or a
CC DNAzyme) an Inozyme (an endolytic nucleic acid cleaving a an RNA molecule
CC possessing an NCH motif), a G-cleaver (cleaving RNA with a NYN motif) pr
CC an amberzyme (cleaving RNA with an NGN triplet), a zinzyme (cleaving RNA
CC with a YGY motif). The CD20-targetting nucleic acid is used to cleave RNA
CC of CD20 in the presence of a divalent cation that is preferably Mg^2^+.
CC Furthermore, it may be contacted with a cell to reduce CD20 activity of
CC the cell and treat a patient having a condition associated with the level
CC of CD20. The treatment may further comprise the use of one or more
CC therapies. In particular, the CD20 targetting nucleic acid may be used to
CC treat lymphoma, leukaemia, B-cell lymphoma, low-grade or follicular non-
CC Hodgkin's lymphoma (NHL), bulky low-grade or follicular NHL, lymphocytic
CC leukaemia, HIV (human immunodeficiency virus) associated NHL, mantle-cell
CC lymphoma (MCL), immunocytoma (IMC), small B-cell lymphocytic lymphoma,
CC immune thrombocytopaenia, and inflammatory arthropathy. The NOGO-
CC targetting nucleic acid is used to cleave RNA of the NOGO gene in the
CC presence of a divalent cation that is preferably Mg^2^+. Furthermore, the
CC nucleic acid may be contacted with a cell to reduce NOGO activity of the
CC cell and treat a patient having a condition associated with the level of
CC NOGO. The treatment may further comprise the use of one or more
CC therapies. In particular, the NOGO-targetting nucleic acid may be used to
CC treat central nervous system (CNS) injury and cerebrovascular accident
CC (CVA, stroke), Alzheimer's disease, dementia, multiple sclerosis (MS),
CC chemotherapy-induced neuropathy, amyotrophic lateral sclerosis (ALS),
CC Parkinson's disease, ataxia, Huntington's disease, Creutzfeldt-Jakob
CC disease, muscular dystrophy, and/or other neurodegenerative disease
CC states which respond to the modulation of NOGO expression. The present
CC sequence is an inozyme of the invention
XX
SQ Sequence 17 BP; 7 A; 3 C; 2 G; 0 T; 5 U; 0 Other;

Query Match 1.6%; Score 14; DB 1; Length 17;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 674 TGAGAAACTGATTT 687
||||||||||||||
Db 17 TGAGAAACTGATTT 4

RESULT 201
ABK00484/c
ID ABK00484 standard; RNA; 17 BP.
XX
AC ABK00484;
XX
DT 12-MAR-2002 (first entry)
XX
DE Human NOGO Hammerhead Ribozyme #484.
XX
KW Human; ss; antisense therapy; cytostatic; antiinflammatory; haemostatic;
KW cerebroprotective; nootropic; neuroprotective; antiparkinsonian;
KW muscular; CD20; neurite growth inhibitor gene; NOGO; hammerhead ribozyme;
KW DNAzyme; inozyme; G-cleaver; amberzyme; zinzyme; lymphoma; leukaemia;
KW B-cell lymphoma; non-Hodgkin's lymphoma; NHL; lymphocytic leukaemia;
KW human immunodeficiency virus; HIV associated NHL; mantle-cell lymphoma;
KW MCL; immunocytoma; IMC; immune thrombocytopaenia; stroke; dementia;
KW inflammatory arthropathy; central nervous system injury;
KW cerebrovascular accident; CVA; Alzheimer's disease; multiple sclerosis;
KW chemotherapy-induced neuropathy; amyotrophic lateral sclerosis; ALS;
KW Parkinson's disease; ataxia; Huntington's disease;
KW Creutzfeldt-Jakob disease; muscular dystrophy; neurodegenerative disease.
XX
OS Homo sapiens.
OS Synthetic.
XX
PN WO200159103-A2.
XX
PD 16-AUG-2001.
XX
PF 09-FEB-2001; 2001WO-US004273.
XX

PR 11-FEB-2000; 2000US-0181797P.
PR 28-FEB-2000; 2000US-0185516P.
PR 06-MAR-2000; 2000US-0187128P.
XX
PA (RIBO-) RIBOZYME PHARM INC.
PA (BLAT/) BLATT L.
PA (MCSW/) MCSWIGGEN J.
PA (CHOW/) CHOWRIRA B M.
XX
PI Blatt L, Mcswiggen J, Chowrira BM;
XX
DR WPI; 2001-607195/69.
XX
PT Nucleic acid molecules, e.g., enzymatic nucleic acids and antisense
PT constructs, which down regulate expression of a CD20 gene or neurite
PT growth inhibitor gene useful for treating, e.g., lymphoma, leukemia, and
PT central nervous system injury.
XX
PS Claim 88; Page 73; 200pp; English.
XX
CC The invention relates to a nucleic acid molecule which down regulates
CC expression of a CD20 gene and a nucleic acid molecule which down
CC regulates expression of a neurite growth inhibitor gene (NOGO). The
CC nucleic acids may be enzymatic nucleic acids (e.g. a ribozyme or a
CC DNAzyme) an Inozyme (an endolytic nucleic acid cleaving a an RNA molecule
CC possessing an NCH motif), a G-cleaver (cleaving RNA with a NYN motif) pr
CC an amberzyme (cleaving RNA with an NGN triplet), a zinzyme (cleaving RNA
CC with a YGY motif). The CD20-targetting nucleic acid is used to cleave RNA
CC of CD20 in the presence of a divalent cation that is preferably Mg^2^+.
CC Furthermore, it may be contacted with a cell to reduce CD20 activity of
CC the cell and treat a patient having a condition associated with the level
CC of CD20. The treatment may further comprise the use of one or more
CC therapies. In particular, the CD20 targetting nucleic acid may be used to
CC treat lymphoma, leukaemia, B-cell lymphoma, low-grade or follicular non-
CC Hodgkin's lymphoma (NHL), bulky low-grade or follicular NHL, lymphocytic
CC leukaemia, HIV (human immunodeficiency virus) associated NHL, mantle-cell
CC lymphoma (MCL), immunocytoma (IMC), small B-cell lymphocytic lymphoma,
CC immune thrombocytopaenia, and inflammatory arthropathy. The NOGO-
CC targetting nucleic acid is used to cleave RNA of the NOGO gene in the
CC presence of a divalent cation that is preferably Mg^2^+. Furthermore, the
CC nucleic acid may be contacted with a cell to reduce NOGO activity of the
CC cell and treat a patient having a condition associated with the level of
CC NOGO. The treatment may further comprise the use of one or more
CC therapies. In particular, the NOGO-targetting nucleic acid may be used to
CC treat central nervous system (CNS) injury and cerebrovascular accident
CC (CVA, stroke), Alzheimer's disease, dementia, multiple sclerosis (MS),
CC chemotherapy-induced neuropathy, amyotrophic lateral sclerosis (ALS),
CC Parkinson's disease, ataxia, Huntington's disease, Creutzfeldt-Jakob
CC disease, muscular dystrophy, and/or other neurodegenerative disease
CC states which respond to the modulation of NOGO expression. The present
CC sequence is a hammerhead ribozyme of the invention
XX
SQ Sequence 17 BP; 6 A; 3 C; 2 G; 0 T; 6 U; 0 Other;

Query Match 1.6%; Score 14; DB 1; Length 17;
Best Local Similarity 100.0%; Pred. No. 1.6e+02;
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 674 TGAGAAACTGATTT 687
||||||||||||||
Db 14 TGAGAAACTGATTT 1

RESULT 202
ABK01996/c
ID ABK01996 standard; RNA; 17 BP.
XX
AC ABK01996;
XX
DT 12-MAR-2002 (first entry)
XX
DE Human NOGO Zinzyme #318.
XX
KW Human; ss; antisense therapy; cytostatic; antiinflammatory; haemostatic;
KW cerebroprotective; nootropic; neuroprotective; antiparkinsonian;
KW muscular; CD20; neurite growth inhibitor gene; NOGO; hammerhead ribozyme;
KW DNAzyme; inozyme; G-cleaver; amberzyme; zinzyme; lymphoma; leukaemia;
KW B-cell lymphoma; non-Hodgkin's lymphoma; NHL; lymphocytic leukaemia;
KW human immunodeficiency virus; HIV associated NHL; mantle-cell lymphoma;
KW MCL; immunocytoma; IMC; immune thrombocytopaenia; stroke; dementia;
KW inflammatory arthropathy; central nervous system injury;
KW cerebrovascular accident; CVA; Alzheimer's disease; multiple sclerosis;
KW chemotherapy-induced neuropathy; amyotrophic lateral sclerosis; ALS;
KW Parkinson's disease; ataxia; Huntington's disease;
KW Creutzfeldt-Jakob disease; muscular dystrophy; neurodegenerative disease.
XX
OS Homo sapiens.
OS Synthetic.
XX
PN WO200159103-A2.
XX
PD 16-AUG-2001.
XX
PF 09-FEB-2001; 2001WO-US004273.
XX
PR 11-FEB-2000; 2000US-0181797P.
PR 28-FEB-2000; 2000US-0185516P.
PR 06-MAR-2000; 2000US-0187128P.
XX
PA (RIBO-) RIBOZYME PHARM INC.
PA (BLAT/) BLATT L.
PA (MCSW/) MCSWIGGEN J.
PA (CHOW/) CHOWRIRA B M.
XX
PI Blatt L, Mcswiggen J, Chowrira BM;
XX
DR WPI; 2001-607195/69.
XX
PT Nucleic acid molecules, e.g., enzymatic nucleic acids and antisense
PT constructs, which down regulate expression of a CD20 gene or neurite
PT growth inhibitor gene useful for treating, e.g., lymphoma, leukemia, and
PT central nervous system injury.
XX
PS Claim 88; Page 101; 200pp; English.
XX
CC The invention relates to a nucleic acid molecule which down regulates
CC expression of a CD20 gene and a nucleic acid molecule which down
CC regulates expression of a neurite growth inhibitor gene (NOGO). The
CC nucleic acids may be enzymatic nucleic acids (e.g. a ribozyme or a
CC DNAzyme) an Inozyme (an endolytic nucleic acid cleaving a an RNA molecule
CC possessing an NCH motif), a G-cleaver (cleaving RNA with a NYN motif) pr
CC an amberzyme (cleaving RNA with an NGN triplet), a zinzyme (cleaving RNA
CC with a YGY motif). The CD20-targetting nucleic acid is used to cleave RNA
CC of CD20 in the presence of a divalent cation that is preferably Mg^2^+.
CC Furthermore, it may be contacted with a cell to reduce CD20 activity of
CC the cell and treat a patient having a condition associated with the level
CC of CD20. The treatment may further comprise the use of one or more
CC therapies. In particular, the CD20 targetting nucleic acid may be used to
CC treat lymphoma, leukaemia, B-cell lymphoma, low-grade or follicular non-
CC Hodgkin's lymphoma (NHL), bulky low-grade or follicular NHL, lymphocytic
CC leukaemia, HIV (human immunodeficiency virus) associated NHL, mantle-cell
CC lymphoma (MCL), immunocytoma (IMC), small B-cell lymphocytic lymphoma,
CC immune thrombocytopaenia, and inflammatory arthropathy. The NOGO-
CC targetting nucleic acid is used to cleave RNA of the NOGO gene in the
CC presence of a divalent cation that is preferably Mg^2^+. Furthermore, the
CC nucleic acid may be contacted with a cell to reduce NOGO activity of the
CC cell and treat a patient having a condition associated with the level of
CC NOGO. The treatment may further comprise the use of one or more
CC therapies. In particular, the NOGO-targetting nucleic acid may be used to
CC treat central nervous system (CNS) injury and cerebrovascular accident
CC (CVA, stroke), Alzheimer's disease, dementia, multiple sclerosis (MS),
CC chemotherapy-induced neuropathy, amyotrophic lateral sclerosis (ALS),
CC Parkinson's disease, ataxia, Huntington's disease, Creutzfeldt-Jakob
CC disease, muscular dystrophy, and/or other neurodegenerative disease
CC states which respond to the modulation of NOGO expression. The present
CC sequence is a zinzyme molecule of the invention

```
XX
SQ   Sequence 17 BP; 6 A; 3 C; 3 G; 0 T; 5 U; 0 Other;

  Query Match             1.6%;  Score 14;  DB 1;  Length 17;
  Best Local Similarity   100.0%;  Pred. No. 1.6e+02;
  Matches   14;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        674 TGAGAAACTGATTT 687
              ||||||||||||||
Db         16 TGAGAAACTGATTT 3


RESULT 203
ACA08316
ID   ACA08316 standard; DNA; 17 BP.
XX
AC   ACA08316;
XX
DT   03-JUN-2003  (first entry)
XX
DE   Necrosis factor kappa B (NFKB) sub-unit modulating DNAzyme #85.
XX
KW   Enzymatic nucleic acid; nuclear factor kappa B; NFKB; inozyme; zinzyme;
KW   G-cleaver; amberzyme; cancer; REL-A activity; breast cancer; lung cancer;
KW   prostate cancer; colorectal cancer; brain cancer; oesophageal cancer;
KW   stomach cancer; bladder cancer; pancreatic cancer; cervical cancer;
KW   head and neck cancer; ovarian cancer; melanoma; lymphoma; glioma;
KW   multidrug resistant cancer; REL-A-specific inhibitor; chemotherapy;
KW   paclitaxel; docetaxel; cisplatin; methotrexate; cyclophosphamide;
KW   doxorubin; fluorouracil carboplatin; edatrexate; gemcitabine;
KW   radiation therapy; inflammatory disease; asthma; diabetes;
KW   rheumatoid arthritis; restenosis; Crohn's disease; obesity; ischaemia;
KW   gene therapy; autoimmune disease; lupus; multiple sclerosis; sepsis;
KW   transplant/graft rejection; reperfusion injury; glomerulonephritis;
KW   allergic airway inflammation; inflammatory bowel disease; infection; ss.
XX
OS   Synthetic.
XX
PN   US2002177568-A1.
XX
PD   28-NOV-2002.
XX
PF   23-MAY-2001; 2001US-00864785.
XX
PR   07-DEC-1992;   92US-00987132.
PR   18-MAY-1994;   94US-00245466.
PR   15-AUG-1994;   94US-00291932.
PR   23-DEC-1996;   96US-00777916.
XX
PA   (STIN/) STINCHCOMB D T.
PA   (MCSW/) MCSWIGGEN J.
PA   (DRAP/) DRAPER K G.
XX
PI   Stinchcomb DT,  Mcswiggen J,  Draper KG;
XX
DR   WPI; 2003-340953/32.
XX
PT   Novel enzymatic nucleic acid molecules which down regulates expression of
PT   a sequence encoding a subunit of nuclear factor kappa B useful for
PT   treating cancer, inflammatory disorders and autoimmune diseases.
XX
PS   Claim 3; Page 48; 72pp; English.
XX
CC   The invention describes an enzymatic nucleic acid molecule (I) which down
CC   regulates expression of a sequence encoding a subunit of nuclear factor
CC   kappa B (NFKB), where (I) is an inozyme, zinzyme, G-cleaver or amberzyme
CC   configuration. The enzymatic nucleic acid molecule is adapted to treat
CC   cancer and is useful for down-regulating REL-A activity in a cell, for
CC   treating a patient having a condition associated with the level of REL-A.
CC   (I) is useful for cleaving RNA comprising a sequence of REL-A gene, in
CC   the presence of a divalent cation, especially Mg^2^+. The enzymatic and
CC   antisense nucleic acid molecules are useful for treating breast, lung,
CC   prostate, colorectal, brain, oesophageal, stomach, bladder, pancreatic,
CC   cervical, head and neck, ovarian cancer, melanoma, lymphoma, glioma or
CC   multidrug resistant cancer. The method involves use of other drug
CC   therapies such as monoclonal antibodies, REL-A-specific inhibitors or
CC   chemotherapy including paclitaxel, docetaxel, cisplatin, methotrexate,
CC   cyclophosphamide, doxorubin, fluorouracil carboplatin, edatrexate,
CC   gemcitabine or radiation therapy. The enzymatic and antisense nucleic
CC   acid molecules are also useful for treating inflammatory disease such as
CC   rheumatoid arthritis, restenosis, asthma, Crohn's disease, diabetes,
CC   obesity, autoimmune disease, lupus, multiple sclerosis, transplant/graft
CC   rejection, gene therapy applications, ischaemia/reperfusion injury
CC   (central nervous system (CNS) and myocardial), glomerulonephritis,
CC   sepsis, allergic airway inflammation, inflammatory bowel disease or
CC   infection. This sequence represents an enzymatic nucleic acid used to
CC   modulate the function of a necrosis factor kappa B sub-unit
XX
SQ   Sequence 17 BP; 2 A; 6 C; 5 G; 0 T; 4 U; 0 Other;

  Query Match             1.6%;  Score 14;  DB 1;  Length 17;
  Best Local Similarity   71.4%;  Pred. No. 1.6e+02;
  Matches   10;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        830 CCCTGTATGGCACT 843
              |||:|:|:|||||:
Db          3 CCCUGUAUGGCACU 16


RESULT 204
ACA09130
ID   ACA09130 standard; RNA; 17 BP.
XX
AC   ACA09130;
XX
DT   03-JUN-2003  (first entry)
XX
DE   NFKB sub-unit modulating amberzyme substrate #293.
XX
KW   Enzymatic nucleic acid; nuclear factor kappa B; NFKB; inozyme; zinzyme;
KW   G-cleaver; amberzyme; cancer; REL-A activity; breast cancer; human;
KW   lung cancer; prostate cancer; colorectal cancer; brain cancer;
KW   oesophageal cancer; stomach cancer; bladder cancer; pancreatic cancer;
KW   cervical cancer; head and neck cancer; ovarian cancer; melanoma;
KW   lymphoma; glioma; multidrug resistant cancer; REL-A-specific inhibitor;
KW   chemotherapy; paclitaxel; docetaxel; cisplatin; methotrexate;
KW   cyclophosphamide; doxorubin; fluorouracil carboplatin; edatrexate;
KW   gemcitabine; radiation therapy; inflammatory disease; asthma; diabetes;
KW   rheumatoid arthritis; restenosis; Crohn's disease; obesity; ischaemia;
KW   gene therapy; autoimmune disease; lupus; multiple sclerosis; sepsis;
KW   transplant/graft rejection; reperfusion injury; glomerulonephritis;
KW   allergic airway inflammation; inflammatory bowel disease; infection; ss.
XX
OS   Homo sapiens.
XX
PN   US2002177568-A1.
XX
PD   28-NOV-2002.
XX
PF   23-MAY-2001; 2001US-00864785.
XX
PR   07-DEC-1992;   92US-00987132.
PR   18-MAY-1994;   94US-00245466.
PR   15-AUG-1994;   94US-00291932.
PR   23-DEC-1996;   96US-00777916.
XX
PA   (STIN/) STINCHCOMB D T.
PA   (MCSW/) MCSWIGGEN J.
PA   (DRAP/) DRAPER K G.
XX
PI   Stinchcomb DT,  Mcswiggen J,  Draper KG;
XX
DR   WPI; 2003-340953/32.
XX
PT   Novel enzymatic nucleic acid molecules which down regulates expression of
PT   a sequence encoding a subunit of nuclear factor kappa B useful for
```

```
PT   treating cancer, inflammatory disorders and autoimmune diseases.
XX
PS   Claim 3; Page 57; 72pp; English.
XX
CC   The invention describes an enzymatic nucleic acid molecule (I) which down
CC   regulates expression of a sequence encoding a subunit of nuclear factor
CC   kappa B (NFKB), where (I) is an inozyme, zinzyme, G-cleaver or amberzyme
CC   configuration. The enzymatic nucleic acid molecule is adapted to treat
CC   cancer and is useful for down-regulating REL-A activity in a cell, for
CC   treating a patient having a condition associated with the level of REL-A.
CC   (I) is useful for cleaving RNA comprising a sequence of REL-A gene, in
CC   the presence of a divalent cation, especially Mg^2^+. The enzymatic and
CC   antisense nucleic acid molecules are useful for treating breast, lung,
CC   prostate, colorectal, brain, oesophageal, stomach, bladder, pancreatic,
CC   cervical, head and neck, ovarian cancer, melanoma, lymphoma, glioma or
CC   multidrug resistant cancer. The method involves use of other drug
CC   therapies such as monoclonal antibodies, REL-A-specific inhibitors or
CC   chemotherapy including paclitaxel, docetaxel, cisplatin, methotrexate,
CC   cyclophosphamide, doxorubin, fluorouracil carboplatin, edatrexate,
CC   gemcitabine or radiation therapy. The enzymatic and antisense nucleic
CC   acid molecules are also useful for treating inflammatory disease such as
CC   rheumatoid arthritis, restenosis, asthma, Crohn's disease, diabetes,
CC   obesity, autoimmune disease, lupus, multiple sclerosis, transplant/graft
CC   rejection, gene therapy applications, ischaemia/reperfusion injury
CC   (central nervous system (CNS) and myocardial), glomerulonephritis,
CC   sepsis, allergic airway inflammation, inflammatory bowel disease or
CC   infection. This sequence represents the substrate of a novel enzymatic
CC   nucleic acid molecule
XX
SQ   Sequence 17 BP; 2 A; 6 C; 5 G; 0 T; 4 U; 0 Other;

  Query Match             1.6%;  Score 14;  DB 1;  Length 17;
  Best Local Similarity   71.4%;  Pred. No. 1.6e+02;
  Matches   10;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        830 CCCTGTATGGCACT 843
              |||:|:|:|||||:
Db          1 CCCUGUAUGGCACU 14


RESULT 205
ACC40921
ID   ACC40921 standard; DNA; 20 BP.
XX
AC   ACC40921;
XX
DT   23-MAY-2003  (first entry)
XX
DE   Human superoxide dismutase 1 antisense inhibitor # ISIS 150475.
XX
KW   Human; superoxide dismutase 1; antisense; neuroprotective; cytostatic;
KW   antiinflammatory; amyotrophic lateral sclerosis; apoptosis;
KW   hyperproliferative disorder; therapy; infection; inflammation; tumour;
KW   ss.
XX
OS   Homo sapiens.
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   modified_base   1. .20
FT                   /*tag=  a
FT                   /mod_base= OTHER
FT                   /note= "Phosphorothioate linkages. All cytosines are 5-
FT                   methylcytosine"
FT   modified_base   1. .5
FT                   /*tag=  b
FT                   /mod_base= OTHER
FT                   /note= "2'-methoxyethyl (2'-MOE) nucleotides"
FT   modified_base   16. .20
FT                   /*tag=  c
FT                   /mod_base= OTHER
FT                   /note= "2'-methoxyethyl (2'-MOE) nucleotides"
XX
PN   WO2003000707-A2.
XX
PD   03-JAN-2003.
XX
PF   19-JUN-2002; 2002WO-US019664.
XX
PR   21-JUN-2001; 2001US-00888360.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Bennett FC,  Dobie K;
XX
DR   WPI; 2003-184032/18.
XX
PT   Novel antisense compounds targeted to nucleic acids encoding human
PT   superoxide dismutase 1, for modulating expression of the dismutase and
PT   treating diseases or conditions, e.g. amyotrophic lateral sclerosis.
XX
PS   Example 15; Page 77; 107pp; English.
XX
CC   The invention relates to a compound of 8-50 nucleobases in length,
CC   targeted to a nucleic acid molecule encoding human superoxide dismutase
CC   1. The compound specifically hybridises with and inhibits the expression
CC   of human superoxide dismutase 1 by hybridising with at least an 8-
CC   nucleobase portion of the nucleic acid molecule encoding the active site
CC   of the enzyme. The activity of compounds of the invention may be
CC   described as neuroprotective, cytostatic and antiinflammatory. The
CC   mechanism of action of compounds of the invention is antisense inhibition
CC   of human superoxide dismutase 1 expression by chimeric phosphorothioate
CC   oligonucleotides having 2'-methoxyethyl (2'-MOE) wings and a deoxy gap.
CC   Compounds of the invention are useful for inhibiting the expression of
CC   human superoxide dismutase 1 in human cells or tissues, and for treating
CC   a disease or condition associated with this enzyme (antisense therapy),
CC   especially amyotrophic lateral sclerosis, a disease or condition arising
CC   from aberrant apoptosis and a hyperproliferative disorder. It may also be
CC   used in diagnostics, therapeutics and as a research reagent, e.g.
CC   prophylactically to prevent or delay infection, inflammation or tumour
CC   formation. Sequences given in records ACC40880-ACC40957 represent human
CC   superoxide dismutase 1 antisense inhibitor oligonucleotides
XX
SQ   Sequence 20 BP; 8 A; 2 C; 2 G; 8 T; 0 U; 0 Other;

  Query Match             1.6%;  Score 14;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 1.8e+02;
  Matches   14;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        711 AGTTTTATAAAACT 724
              ||||||||||||||
Db          3 AGTTTTATAAAACT 16


RESULT 206
ACC40922
ID   ACC40922 standard; DNA; 20 BP.
XX
AC   ACC40922;
XX
DT   23-MAY-2003  (first entry)
XX
DE   Human superoxide dismutase 1 antisense inhibitor # ISIS 150476.
XX
KW   Human; superoxide dismutase 1; antisense; neuroprotective; cytostatic;
KW   antiinflammatory; amyotrophic lateral sclerosis; apoptosis;
KW   hyperproliferative disorder; therapy; infection; inflammation; tumour;
KW   ss.
XX
OS   Homo sapiens.
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   modified_base   1. .20
FT                   /*tag=  a
FT                   /mod_base= OTHER
```

```
FT                   /note= "Phosphorothioate linkages. All cytosines are 5-
FT                   methylcytosine"
FT   modified_base   1. .5
FT                   /*tag=  b
FT                   /mod_base= OTHER
FT                   /note= "2'-methoxyethyl (2'-MOE) nucleotides"
FT   modified_base   16. .20
FT                   /*tag=  c
FT                   /mod_base= OTHER
FT                   /note= "2'-methoxyethyl (2'-MOE) nucleotides"
XX
PN   WO2003000707-A2.
XX
PD   03-JAN-2003.
XX
PF   19-JUN-2002; 2002WO-US019664.
XX
PR   21-JUN-2001; 2001US-00888360.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Bennett FC,  Dobie K;
XX
DR   WPI; 2003-184032/18.
XX
PT   Novel antisense compounds targeted to nucleic acids encoding human
PT   superoxide dismutase 1, for modulating expression of the dismutase and
PT   treating diseases or conditions, e.g. amyotrophic lateral sclerosis.
XX
PS   Example 15; Page 77; 107pp; English.
XX
CC   The invention relates to a compound of 8-50 nucleobases in length,
CC   targeted to a nucleic acid molecule encoding human superoxide dismutase
CC   1. The compound specifically hybridises with and inhibits the expression
CC   of human superoxide dismutase 1 by hybridising with at least an 8-
CC   nucleobase portion of the nucleic acid molecule encoding the active site
CC   of the enzyme. The activity of compounds of the invention may be
CC   described as neuroprotective, cytostatic and antiinflammatory. The
CC   mechanism of action of compounds of the invention is antisense inhibition
CC   of human superoxide dismutase 1 expression by chimeric phosphorothioate
CC   oligonucleotides having 2'-methoxyethyl (2'-MOE) wings and a deoxy gap.
CC   Compounds of the invention are useful for inhibiting the expression of
CC   human superoxide dismutase 1 in human cells or tissues, and for treating
CC   a disease or condition associated with this enzyme (antisense therapy),
CC   especially amyotrophic lateral sclerosis, a disease or condition arising
CC   from aberrant apoptosis and a hyperproliferative disorder. It may also be
CC   used in diagnostics, therapeutics and as a research reagent, e.g.
CC   prophylactically to prevent or delay infection, inflammation or tumour
CC   formation. Sequences given in records ACC40880-ACC40957 represent human
CC   superoxide dismutase 1 antisense inhibitor oligonucleotides
XX
SQ   Sequence 20 BP; 9 A; 2 C; 2 G; 7 T; 0 U; 0 Other;

  Query Match             1.6%;  Score 14;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 1.8e+02;
  Matches   14;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        711 AGTTTTATAAAACT 724
              ||||||||||||||
Db          6 AGTTTTATAAAACT 19


RESULT 207
AAX73200/c
ID   AAX73200 standard; RNA; 17 BP.
XX
AC   AAX73200;
XX
DT   28-JUL-1999  (first entry)
XX
DE   Mouse flk-1 VEGF receptor hammerhead ribozyme substrate #633.
XX
KW   Vascular endothelial growth factor receptor; VEGF receptor; flt-1; flk-1;
KW   KDR; hammerhead ribozyme; hairpin ribozyme; cleavage;
KW   tumour angiogenesis; psoriasis; rheumatoid arthritis; ocular disease;
KW   fms-like tyrosine kinase 1; kinase insert domain containing receptor;
KW   foetal liver kinase 1; ss.
XX
OS   Mus sp.
XX
PN   WO9715662-A2.
XX
PD   01-MAY-1997.
XX
PF   25-OCT-1996;   96WO-US017480.
XX
PR   26-OCT-1995;   95US-0005974P.
PR   11-JAN-1996;   96US-00584040.
XX
PA   (RIBO-) RIBOZYME PHARM INC.
PA   (CHIR ) CHIRON CORP.
XX
PI   Pavco P,  Mcswiggen J,  Stinchcomb D,  Escobedo J;
XX
DR   WPI; 1997-259017/23.
XX
PT   Nucleic acid molecule modulating VEGF receptor(s) gene expression or mRNA
PT   stability - useful for treating e.g. tumour angiogenesis, psoriasis,
PT   rheumatoid arthritis, etc., in a human patient.
XX
PS   Claim 4; Page 143; 218pp; English.
XX
CC   The present invention describes nucleic acid molecules which modulate the
CC   synthesis, expression and/or stability of a mRNA encoding 1 or more
CC   receptors of vascular endothelial growth factor (VEGF). A patient
CC   (preferably human) having a condition associated with the level of the
CC   fms-like tyrosine kinase 1 (flt-1), kinase insert domain containing
CC   receptor (KDR) and/or foetal liver kinase 1 (flk-1) (e.g. tumour
CC   angiogenesis, ocular diseases, psoriasis and rheumatoid arthritis) can be
CC   treated by administering the nucleic acid molecule or the expression
CC   vector to the patient. AAX67275 to AAX75752 represent specific examples
CC   of nucleic acid molecules from the present invention
XX
SQ   Sequence 17 BP; 5 A; 5 C; 5 G; 0 T; 2 U; 0 Other;

  Query Match             1.6%;  Score 13.8;  DB 1;  Length 17;
  Best Local Similarity   88.2%;  Pred. No. 1.7e+02;
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        543 TGTAGTCTGAGGCCCCT 559
              || |||||||| ||||
Db         17 TGCAGTCTGAGGTCCCT 1


RESULT 208
AAV96545
ID   AAV96545 standard; RNA; 17 BP.
XX
AC   AAV96545;
XX
DT   01-MAR-1999  (first entry)
XX
DE   Potato citrate synthase target sequence position 858.
XX
KW   Solanidine; glucosyltransferase; potato; citrate synthase; target;
KW   hammerhead ribozyme; hairpin ribozyme; alkaloid biosynthesis;
KW   flower formation; cleavage; solanaceous plant; ss.
XX
OS   Solanum tuberosum.
XX
PN   WO9832843-A2.
XX
PD   30-JUL-1998.
XX
PF   14-JAN-1998;   98WO-US000738.
XX
```

PR 28-JAN-1997; 97US-0036545P.
PR 28-JAN-1997; 97US-0036599P.
PR 24-NOV-1997; 97US-00979416.
XX
PA (RIBO-) RIBOZYME PHARM INC.
XX
PI Zwick MG, Mcswiggen JA;
XX
DR WPI; 1998-427939/36.
XX
PT New enzymatic nucleic acid(s) - useful for, e.g. reducing alkaloid
PT biosynthesis or regulating flowering.
XX
PS Claim 53; Page 55; 79pp; English.
XX
CC The present invention describes enzymatic nucleic acid molecules with RNA
CC -cleaving activity (e.g. ribozymes) which are capable of modulating the
CC expression of plant genes: (i) involved in biosynthesis of alkaloids; or
CC (ii) involved in flower formation. AAV95982 to AAV96334, and AAV96335 to
CC AAV96354 represent potato solanidine glucosyltransferase hammerhead and
CC hairpin ribozymes, respectively. AAV95629 to AAV95981, and AAV96355 to
CC AAV96734 represent potato solanidine glucosyltransferase target
CC sequences. AAV96773 to AAV97170, and AAV97171 to AAV97195 represent
CC potato citrate synthase hammerhead and hairpin ribozymes, respectively.
CC AAV96735 to AAV96772, and AAV97196 to AAV97220 represent potato citrate
CC synthase target sequences. Ribozymes of the present invention can be used
CC to inhibit the synthesis of toxic alkaloids in solanaceous plants,
CC particularly potato but also tomato, pepper, aubergine and ditura or to
CC inhibit flowering in potato, lettuce, spinach, cabbage, brussel sprouts,
CC arugula, kale, collards, chard, beet, turnip, sweet potato and turf
CC grass. Also the ribozymes can be used for RNA manipulation in the same
CC way that restriction endonucleases are for DNA, as well as to examine
CC genetic drift and mutations in plants and to detect specific RNA. The
CC ribozymes can be targeted to specific genes or to consensus sequences
CC within a family of related genes, and being catalytic need to be present
CC at only very low concentrations
XX
SQ Sequence 17 BP; 4 A; 3 C; 4 G; 0 T; 6 U; 0 Other;

Query Match 1.6%; Score 13.8; DB 1; Length 17;
Best Local Similarity 52.9%; Pred. No. 1.7e+02;
Matches 9; Conservative 6; Mismatches 2; Indels 0; Gaps 0;

Qy 839 GCACTTATTATGAGGCT 855
| ||:: ::|:|||||:
Db 1 GAACUUCUUAUGAGGCU 17

RESULT 209
AAF04937
ID AAF04937 standard; DNA; 17 BP.
XX
AC AAF04937;
XX
DT 16-FEB-2001 (first entry)
XX
DE Hammerhead ribozyme substrate #2453.
XX
KW Ribozyme; erythropoietin; granulocyte colony stimulating factor;
KW interferon alpha; ss.
XX
OS Homo sapiens.
XX
PN WO200061729-A2.
XX
PD 19-OCT-2000.
XX
PF 11-APR-2000; 2000WO-US009721.
XX
PR 12-APR-1999; 99US-0129390P.
XX
PA (RIBO-) RIBOZYME PHARM INC.
XX
PI Blatt L, Zwick M, Pavco P, Mcswiggen J;
XX
DR WPI; 2000-647423/62.
XX
PT Enzymatic and antisense nucleic acid inhibition of repressor genes,
PT useful for producing e.g. granulocyte colony stimulating factor protein,
PT interferon alpha and erythropoietin.
XX
PS Claim 4; Page 111; 164pp; English.
XX
CC The present invention relates to enzymatic and antisense nucleic acid
CC molecules that act as inhibitors of the expression of repressor genes
CC encoding the TR2 Orphan receptor, EAR3/COUP-TF-1, the GATA transcription
CC factor gene, IRF-2 and/or the CAATT Displacement Protein (CDP).
CC Inhibition of the repressors removes prevents inhibition (and
CC consequently increases expression of) genes involved in the production of
CC erythropoietin, granulocyte colony stimulating factor protein and
CC interferon alpha
XX
SQ Sequence 17 BP; 4 A; 2 C; 4 G; 7 T; 0 U; 0 Other;

Query Match 1.6%; Score 13.8; DB 1; Length 17;
Best Local Similarity 88.2%; Pred. No. 1.7e+02;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 778 TGGGTATTAAACTTGTC 794
||||| |||||| ||||
Db 1 TGGGTTTTAAACATGTC 17

RESULT 210
AAF04936
ID AAF04936 standard; DNA; 17 BP.
XX
AC AAF04936;
XX
DT 16-FEB-2001 (first entry)
XX
DE Hammerhead ribozyme substrate #2452.
XX
KW Ribozyme; erythropoietin; granulocyte colony stimulating factor;
KW interferon alpha; ss.
XX
OS Homo sapiens.
XX
PN WO200061729-A2.
XX
PD 19-OCT-2000.
XX
PF 11-APR-2000; 2000WO-US009721.
XX
PR 12-APR-1999; 99US-0129390P.
XX
PA (RIBO-) RIBOZYME PHARM INC.
XX
PI Blatt L, Zwick M, Pavco P, Mcswiggen J;
XX
DR WPI; 2000-647423/62.
XX
PT Enzymatic and antisense nucleic acid inhibition of repressor genes,
PT useful for producing e.g. granulocyte colony stimulating factor protein,
PT interferon alpha and erythropoietin.
XX
PS Claim 4; Page 111; 164pp; English.
XX
CC The present invention relates to enzymatic and antisense nucleic acid
CC molecules that act as inhibitors of the expression of repressor genes
CC encoding the TR2 Orphan receptor, EAR3/COUP-TF-1, the GATA transcription
CC factor gene, IRF-2 and/or the CAATT Displacement Protein (CDP).
CC Inhibition of the repressors removes prevents inhibition (and
CC consequently increases expression of) genes involved in the production of
CC erythropoietin, granulocyte colony stimulating factor protein and
CC interferon alpha

```
XX
SQ   Sequence 17 BP; 5 A; 1 C; 4 G; 7 T; 0 U; 0 Other;

  Query Match             1.6%;  Score 13.8;  DB 1;  Length 17;
  Best Local Similarity   88.2%;  Pred. No. 1.7e+02;
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        777 ATGGGTATTAAACTTGT 793
              |||||| |||||| |||
Db          1 ATGGGTTTTAAACATGT 17


RESULT 211
AAF04935
ID   AAF04935 standard; DNA; 17 BP.
XX
AC   AAF04935;
XX
DT   16-FEB-2001  (first entry)
XX
DE   Hammerhead ribozyme substrate #2451.
XX
KW   Ribozyme; erythropoietin; granulocyte colony stimulating factor;
KW   interferon alpha; ss.
XX
OS   Homo sapiens.
XX
PN   WO200061729-A2.
XX
PD   19-OCT-2000.
XX
PF   11-APR-2000; 2000WO-US009721.
XX
PR   12-APR-1999;   99US-0129390P.
XX
PA   (RIBO-) RIBOZYME PHARM INC.
XX
PI   Blatt L,  Zwick M,  Pavco P,  Mcswiggen J;
XX
DR   WPI; 2000-647423/62.
XX
PT   Enzymatic and antisense nucleic acid inhibition of repressor genes,
PT   useful for producing e.g. granulocyte colony stimulating factor protein,
PT   interferon alpha and erythropoietin.
XX
PS   Claim 4; Page 111; 164pp; English.
XX
CC   The present invention relates to enzymatic and antisense nucleic acid
CC   molecules that act as inhibitors of the expression of repressor genes
CC   encoding the TR2 Orphan receptor, EAR3/COUP-TF-1, the GATA transcription
CC   factor gene, IRF-2 and/or the CAATT Displacement Protein (CDP).
CC   Inhibition of the repressors removes prevents inhibition (and
CC   consequently increases expression of) genes involved in the production of
CC   erythropoietin, granulocyte colony stimulating factor protein and
CC   interferon alpha
XX
SQ   Sequence 17 BP; 5 A; 1 C; 5 G; 6 T; 0 U; 0 Other;

  Query Match             1.6%;  Score 13.8;  DB 1;  Length 17;
  Best Local Similarity   88.2%;  Pred. No. 1.7e+02;
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        776 GATGGGTATTAAACTTG 792
              ||||||| |||||| ||
Db          1 GATGGGTTTTAAACATG 17


RESULT 212
ABK01097/c
ID   ABK01097 standard; RNA; 17 BP.
XX
AC   ABK01097;
XX
DT   12-MAR-2002  (first entry)
XX
DE   Human NOGO Inozyme #367.
XX
KW   Human; ss; antisense therapy; cytostatic; antiinflammatory; haemostatic;
KW   cerebroprotective; nootropic; neuroprotective; antiparkinsonian;
KW   muscular; CD20; neurite growth inhibitor gene; NOGO; hammerhead ribozyme;
KW   DNAzyme; inozyme; G-cleaver; amberzyme; zinzyme; lymphoma; leukaemia;
KW   B-cell lymphoma; non-Hodgkin's lymphoma; NHL; lymphocytic leukaemia;
KW   human immunodeficiency virus; HIV associated NHL; mantle-cell lymphoma;
KW   MCL; immunocytoma; IMC; immune thrombocytopaenia; stroke; dementia;
KW   inflammatory arthropathy; central nervous system injury;
KW   cerebrovascular accident; CVA; Alzheimer's disease; multiple sclerosis;
KW   chemotherapy-induced neuropathy; amyotrophic lateral sclerosis; ALS;
KW   Parkinson's disease; ataxia; Huntington's disease;
KW   Creutzfeldt-Jakob disease; muscular dystrophy; neurodegenerative disease.
XX
OS   Homo sapiens.
OS   Synthetic.
XX
PN   WO200159103-A2.
XX
PD   16-AUG-2001.
XX
PF   09-FEB-2001; 2001WO-US004273.
XX
PR   11-FEB-2000; 2000US-0181797P.
PR   28-FEB-2000; 2000US-0185516P.
PR   06-MAR-2000; 2000US-0187128P.
XX
PA   (RIBO-) RIBOZYME PHARM INC.
PA   (BLAT/) BLATT L.
PA   (MCSW/) MCSWIGGEN J.
PA   (CHOW/) CHOWRIRA B M.
XX
PI   Blatt L,  Mcswiggen J,  Chowrira BM;
XX
DR   WPI; 2001-607195/69.
XX
PT   Nucleic acid molecules, e.g., enzymatic nucleic acids and antisense
PT   constructs, which down regulate expression of a CD20 gene or neurite
PT   growth inhibitor gene useful for treating, e.g., lymphoma, leukemia, and
PT   central nervous system injury.
XX
PS   Claim 88; Page 83; 200pp; English.
XX
CC   The invention relates to a nucleic acid molecule which down regulates
CC   expression of a CD20 gene and a nucleic acid molecule which down
CC   regulates expression of a neurite growth inhibitor gene (NOGO). The
CC   nucleic acids may be enzymatic nucleic acids (e.g. a ribozyme or a
CC   DNAzyme) an Inozyme (an endolytic nucleic acid cleaving a an RNA molecule
CC   possessing an NCH motif), a G-cleaver (cleaving RNA with a NYN motif) pr
CC   an amberzyme (cleaving RNA with an NGN triplet), a zinzyme (cleaving RNA
CC   with a YGY motif). The CD20-targetting nucleic acid is used to cleave RNA
CC   of CD20 in the presence of a divalent cation that is preferably Mg^2^+.
CC   Furthermore, it may be contacted with a cell to reduce CD20 activity of
CC   the cell and treat a patient having a condition associated with the level
CC   of CD20. The treatment may further comprise the use of one or more
CC   therapies. In particular, the CD20 targetting nucleic acid may be used to
CC   treat lymphoma, leukaemia, B-cell lymphoma, low-grade or follicular non-
CC   Hodgkin's lymphoma (NHL), bulky low-grade or follicular NHL, lymphocytic
CC   leukaemia, HIV (human immunodeficiency virus) associated NHL, mantle-cell
CC   lymphoma (MCL), immunocytoma (IMC), small B-cell lymphocytic lymphoma,
CC   immune thrombocytopaenia, and inflammatory arthropathy. The NOGO-
CC   targetting nucleic acid is used to cleave RNA of the NOGO gene in the
CC   presence of a divalent cation that is preferably Mg^2^+. Furthermore, the
CC   nucleic acid may be contacted with a cell to reduce NOGO activity of the
CC   cell and treat a patient having a condition associated with the level of
CC   NOGO. The treatment may further comprise the use of one or more
CC   therapies. In particular, the NOGO-targetting nucleic acid may be used to
CC   treat central nervous system (CNS) injury and cerebrovascular accident
CC   (CVA, stroke), Alzheimer's disease, dementia, multiple sclerosis (MS),
CC   chemotherapy-induced neuropathy, amyotrophic lateral sclerosis (ALS),
```

```
CC   Parkinson's disease, ataxia, Huntington's disease, Creutzfeldt-Jakob
CC   disease, muscular dystrophy, and/or other neurodegenerative disease
CC   states which respond to the modulation of NOGO expression. The present
CC   sequence is an inozyme of the invention
XX
SQ   Sequence 17 BP; 7 A; 3 C; 1 G; 0 T; 6 U; 0 Other;

  Query Match             1.6%;  Score 13.8;  DB 1;  Length 17;
  Best Local Similarity   88.2%;  Pred. No. 1.7e+02;
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        730 AAAATGTCTGTTTCAAT 746
              ||||||| |||| ||||
Db         17 AAAATGTTTGTTGCAAT 1


RESULT 213
ABA80297/c
ID   ABA80297 standard; DNA; 17 BP.
XX
AC   ABA80297;
XX
DT   24-JAN-2002  (first entry)
XX
DE   MLH1 mutation correcting oligonucleotide SEQ ID NO: 3143.
XX
KW   Human; gene therapy; adenosine deaminase deficiency; p53; beta-globin;
KW   retinoblastoma; BRCA1; BRCA2; CFTR; cystic fibrosis; cancer; Factor V;
KW   cyclin-dependent kinase inhibitor 2A; CDKN2A; melanoma; APC; HBA1; HBA2;
KW   adenomatous polyposis of the colon; Factor VII; Factor IX; thrombosis;
KW   haemophilia; alpha thalassaemia; haemoglobin alpha locus 1; MLH1; APOE;
KW   mismatch repair; MSH2; MSH6; hyperlipidaemia; apolipoprotein E; LDLR;
KW   familial hypercholesterolaemia; UGT1; syndrome; APP; PSEN1; antisense;
KW   UDP-glucuronosyltransferase; amyloid precursor protein; presenilin-1;
KW   Alzheimer's disease; cytostatic; antisickling; antianaemic; haemostatic;
KW   antilipemic; ss.
XX
OS   Homo sapiens.
XX
PN   WO200173002-A2.
XX
PD   04-OCT-2001.
XX
PF   27-MAR-2001; 2001WO-US009761.
XX
PR   27-MAR-2000; 2000US-0192176P.
PR   27-MAR-2000; 2000US-0192179P.
PR   01-JUN-2000; 2000US-0208538P.
PR   30-OCT-2000; 2000US-0244989P.
XX
PA   (UYDE ) UNIV DELAWARE.
XX
PI   Kmiec EB,  Gamper HB,  Rice MC;
XX
DR   WPI; 2001-639230/73.
XX
PT   Oligonucleotide for targeted alterations of genetic sequences and for
PT   treating cystic fibrosis, comprises at least one mismatch and chemical
PT   modification.
XX
PS   Claim 7; Page 217; 294pp; English.
XX
CC   The present invention provides single-stranded oligonucleotides which can
CC   be used for the targeted alteration of genomic sequences, where the
CC   oligonucleotide has at least one mismatch compared with the genomic
CC   sequence to be altered. In particular, these sequences are directed at
CC   the following genes: adenosine deaminase, p53, beta-globin,
CC   retinoblastoma, BRCA1, BRCA2, CFTR, cyclin-dependent kinase inhibitor 2A
CC   (CDKN2A), APC, Factor V, Factor VIII, Factor IX, haemoglobin alpha locus
CC   1 (HBA1), haemoglobin alpha locus 2 (HBA2), MLH1, MSH2, MSH6,
CC   apolipoprotein E (APOE), LDL receptor (LDLR), UDP-glucuronosyltransferase
CC   (UGT1), amyloid precursor protein (APC), presenilin-1 (PSEN1) and
CC   presenilin-2 (PSEN2). These can be used in the gene therapy of diseases
CC   such as cancer, adenosine deaminase deficiency, cystic fibrosis,
CC   haemophilia, hypercholesterolaemia, thalassaemia, sickle cell anaemia,
CC   Alzheimer's disease, melanoma, adenomatous polyposis of the colon and
CC   various syndromes. The present sequence is one of the gene correcting
CC   oligonucleotides of the invention
XX
SQ   Sequence 17 BP; 7 A; 2 C; 2 G; 6 T; 0 U; 0 Other;

  Query Match             1.6%;  Score 13.8;  DB 1;  Length 17;
  Best Local Similarity   88.2%;  Pred. No. 1.7e+02;
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        676 AGAAACTGATTTATGAT 692
              ||| ||| |||||||||
Db         17 AGATACTCATTTATGAT 1


RESULT 214
ABA80296
ID   ABA80296 standard; DNA; 17 BP.
XX
AC   ABA80296;
XX
DT   24-JAN-2002  (first entry)
XX
DE   MLH1 mutation correcting oligonucleotide SEQ ID NO: 3142.
XX
KW   Human; gene therapy; adenosine deaminase deficiency; p53; beta-globin;
KW   retinoblastoma; BRCA1; BRCA2; CFTR; cystic fibrosis; cancer; Factor V;
KW   cyclin-dependent kinase inhibitor 2A; CDKN2A; melanoma; APC; HBA1; HBA2;
KW   adenomatous polyposis of the colon; Factor VII; Factor IX; thrombosis;
KW   haemophilia; alpha thalassaemia; haemoglobin alpha locus 1; MLH1; APOE;
KW   mismatch repair; MSH2; MSH6; hyperlipidaemia; apolipoprotein E; LDLR;
KW   familial hypercholesterolaemia; UGT1; syndrome; APP; PSEN1; antisense;
KW   UDP-glucuronosyltransferase; amyloid precursor protein; presenilin-1;
KW   Alzheimer's disease; cytostatic; antisickling; antianaemic; haemostatic;
KW   antilipemic; ss.
XX
OS   Homo sapiens.
XX
PN   WO200173002-A2.
XX
PD   04-OCT-2001.
XX
PF   27-MAR-2001; 2001WO-US009761.
XX
PR   27-MAR-2000; 2000US-0192176P.
PR   27-MAR-2000; 2000US-0192179P.
PR   01-JUN-2000; 2000US-0208538P.
PR   30-OCT-2000; 2000US-0244989P.
XX
PA   (UYDE ) UNIV DELAWARE.
XX
PI   Kmiec EB,  Gamper HB,  Rice MC;
XX
DR   WPI; 2001-639230/73.
XX
PT   Oligonucleotide for targeted alterations of genetic sequences and for
PT   treating cystic fibrosis, comprises at least one mismatch and chemical
PT   modification.
XX
PS   Claim 7; Page 217; 294pp; English.
XX
CC   The present invention provides single-stranded oligonucleotides which can
CC   be used for the targeted alteration of genomic sequences, where the
CC   oligonucleotide has at least one mismatch compared with the genomic
CC   sequence to be altered. In particular, these sequences are directed at
CC   the following genes: adenosine deaminase, p53, beta-globin,
CC   retinoblastoma, BRCA1, BRCA2, CFTR, cyclin-dependent kinase inhibitor 2A
CC   (CDKN2A), APC, Factor V, Factor VIII, Factor IX, haemoglobin alpha locus
CC   1 (HBA1), haemoglobin alpha locus 2 (HBA2), MLH1, MSH2, MSH6,
CC   apolipoprotein E (APOE), LDL receptor (LDLR), UDP-glucuronosyltransferase
CC   (UGT1), amyloid precursor protein (APC), presenilin-1 (PSEN1) and
```

```
CC   presenilin-2 (PSEN2). These can be used in the gene therapy of diseases
CC   such as cancer, adenosine deaminase deficiency, cystic fibrosis,
CC   haemophilia, hypercholesterolaemia, thalassaemia, sickle cell anaemia,
CC   Alzheimer's disease, melanoma, adenomatous polyposis of the colon and
CC   various syndromes. The present sequence is one of the gene correcting
CC   oligonucleotides of the invention
XX
SQ   Sequence 17 BP; 6 A; 2 C; 2 G; 7 T; 0 U; 0 Other;

  Query Match             1.6%;  Score 13.8;  DB 1;  Length 17;
  Best Local Similarity   88.2%;  Pred. No. 1.7e+02;
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        676 AGAAACTGATTTATGAT 692
              ||| ||| |||||||||
Db          1 AGATACTCATTTATGAT 17


RESULT 215
AAF91029/c
ID   AAF91029 standard; DNA; 17 BP.
XX
AC   AAF91029;
XX
DT   04-MAY-2001  (first entry)
XX
DE   Human multi drug resistance-1 gene related sequence SEQ ID NO: 116.
XX
KW   Human; MDR-1; multi drug resistance-1; drug uptake; disease; cancer;
KW   inflammatory disease; neuronal disease; CNS disease;
KW   cardiovascular disease; PCR primer; ss.
XX
OS   Homo sapiens.
XX
PN   WO200109183-A2.
XX
PD   08-FEB-2001.
XX
PF   28-JUL-2000; 2000WO-EP007314.
XX
PR   30-JUL-1999;   99EP-00114938.
PR   22-FEB-2000; 2000EP-00103361.
XX
PA   (EPID-) EPIDAUROS BIOTECHNOLOGIE AG.
XX
PI   Brinkmann U,  Hoffmeyer S,  Eichelbaum M,  Roots I;
XX
DR   WPI; 2001-159855/16.
XX
PT   New polynucleotide encoding a molecular variant Multi Drug Resistance
PT   (MDR)-1 polypeptide is useful for diagnosing and treating diseases
PT   associated with abnormal MDR-1 expression or function, e.g. cancer.
XX
PS   Claim 1; Page 101; 154pp; English.
XX
CC   The present invention provides nucleotides encoding molecular variants of
CC   the human multi drug resistance-1 (MDR-1) protein. These can be used to
CC   identify compounds capable of treating multidrug resistance and
CC   sensitivity interfering resulting from polymorphisms in MDR-1, which can
CC   lead to difficulties in treating cancer, cardiovascular, neuronal,
CC   inflammatory and CNS diseases
XX
SQ   Sequence 17 BP; 5 A; 5 C; 3 G; 4 T; 0 U; 0 Other;

  Query Match             1.6%;  Score 13.8;  DB 1;  Length 17;
  Best Local Similarity   88.2%;  Pred. No. 1.7e+02;
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        319 GGGCAATGTGACTGCTG 335
              | ||||||| |||||||
Db         17 GTGCAATGTAACTGCTG 1


RESULT 216
ABN08968
ID   ABN08968 standard; DNA; 17 BP.
XX
AC   ABN08968;
XX
DT   29-MAY-2002  (first entry)
XX
DE   Human GDMLP-1 17-mer scanning SEQ ID NO:5 sequence SEQ ID NO:8960.
XX
KW   Human; genome-derived myosin-like protein 1; GDMLP-1; hGDMLP-1; heart;
KW   muscle; myosin; chromosome 22; gene therapy; vaccine; heart disease;
KW   skeletal muscle disorder; amplicon; screening; ss.
XX
OS   Homo sapiens.
XX
PN   WO200192524-A2.
XX
PD   06-DEC-2001.
XX
PF   25-MAY-2001; 2001WO-US016981.
XX
PR   26-MAY-2000; 2000US-0207456P.
PR   21-SEP-2000; 2000US-0234687P.
PR   27-SEP-2000; 2000US-0236359P.
PR   04-OCT-2000; 2000GB-00024263.
PR   30-JAN-2001; 2001WO-US000661.
PR   30-JAN-2001; 2001WO-US000662.
PR   30-JAN-2001; 2001WO-US000663.
PR   30-JAN-2001; 2001WO-US000664.
PR   30-JAN-2001; 2001WO-US000665.
PR   30-JAN-2001; 2001WO-US000666.
PR   30-JAN-2001; 2001WO-US000667.
PR   30-JAN-2001; 2001WO-US000668.
PR   30-JAN-2001; 2001WO-US000669.
PR   30-JAN-2001; 2001WO-US000670.
PR   05-FEB-2001; 2001US-0266860P.
XX
PA   (AEOM-) AEOMICA INC.
XX
PI   Gu Y,  Ji Y,  Penn SG,  Hanzel DK,  Rank DR,  Chen W,  Shannon ME;
XX
DR   WPI; 2002-179446/23.
XX
PT   New polypeptide, for raising antibodies that recognize hGDMLP-1 proteins,
PT   or as specific biomolecule capture probes for surface-enhanced laser
PT   desorption ionization, comprises human myosin-like protein hGDMLP-1.
XX
PS   Disclosure; SEQ ID NO 8960; 214pp; English.
XX
CC   The present invention describes a human genome-derived myosin-like
CC   protein 1 (hGDMLP-1). The protein and polynucleotide sequences of hGDMLP-
CC   1 can be used in gene therapy and vaccine production. The hGDMLP-1
CC   nucleic acids can be used as probes to detect, characterise and quantify
CC   hGDMLP-1 nucleic acids in samples, as amplification substrates, to
CC   provide initial substrates for the recombinant engineering of hGDMLP-1
CC   protein variants having desired phenotypic improvements, and for
CC   expressing the proteins. The hGDMLP-1 proteins or polypeptides may be
CC   used as immunogens to raise antibodies that specifically recognise hGDMLP
CC   -1 proteins, as standards in assays used to determine the concentration
CC   and/or amount specifically of hGDMLP proteins, as specific biomolecule
CC   capture probes for surface-enhanced laser desorption ionisation, as
CC   therapeutic supplement in patients having specific deficiency in hGDMLP-1
CC   production, and in vaccines or for replacement therapy. The
CC   polynucleotide sequences encoding hGDMLP-1 may be used for diagnosing a
CC   disorder associated with the expression of hGDMLP-1, in particular heart
CC   and skeletal muscle disorders. hGDMLP-1 is localised to chromosome 22.
CC   The present sequence represents an oligomer used in the screening of the
CC   hGDMLP-1 sequence in the exemplification of the present invention. N.B.
CC   The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format directly from WIPO
CC   at ftp.wipo.int/pub/published_pct_sequence
XX
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```
SQ   Sequence 17 BP; 5 A; 4 C; 6 G; 2 T; 0 U; 0 Other;

  Query Match             1.6%;  Score 13.8;  DB 1;  Length 17;
  Best Local Similarity   88.2%;  Pred. No. 1.7e+02;
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        183 CTGAAGGCCTGCATGGA 199
              |||||||||  ||||||
Db          1 CTGAAGGCCGACATGGA 17


RESULT 217
ACN03785
ID   ACN03785 standard; RNA; 17 BP.
XX
AC   ACN03785;
XX
DT   22-APR-2004  (first entry)
XX
DE   WNV Zinzyme substrate SEQ ID NO 3788.
XX
KW   WNV; West Nile Virus; antiinflammatory; cytostatic; hepatotropic;
KW   virucide; neuroprotective; antibacterial; replication; pancreatitis;
KW   encephalitis; myocarditis; meningitis; infection; hepatitis;
KW   liver failure; cancer; cirrhosis; Hammerhead; Inozyme; DNAzyme;
KW   Amberzyme; Zinzyme; ss.
XX
OS   West Nile Virus.
XX
PN   WO200268637-A2.
XX
PD   06-SEP-2002.
XX
PF   19-OCT-2001; 2001WO-US048350.
XX
PR   20-OCT-2000; 2000US-0242411P.
XX
PA   (RIBO-) RIBOZYME PHARM INC.
PA   (BLAT/) BLATT L.
PA   (MCSW/) MCSWIGGEN J A.
XX
PI   Blatt L,  Mcswiggen JA;
XX
DR   WPI; 2002-706994/76.
XX
PT   New nucleic acid molecule that modulates replication of West Nile Virus
PT   (WNV), useful for treating a condition related to WNV infection e.g.
PT   pancreatitis, meningitis, hepatocellular carcinoma or cirrhosis.
XX
PS   Claim 23; SEQ ID NO 3788; 495pp; English.
XX
CC   The invention relates to nucleic acid molecules that modulate replication
CC   of the West Nile Virus (WNV). The nucleic acid molecules are useful for
CC   treating a condition related to WNV infection e.g. pancreatitis,
CC   encephalitis, myocarditis, meningitis, neurologic infection, hepatitis,
CC   liver failure, hepatocellular carcinoma or cirrhosis. The nucleic acid
CC   molecule is selected from the group of ribozymes consisting of
CC   Hammerhead, Inozyme, G-cleaver, DNAzyme, Amberzyme and Zinzyme. The
CC   nucleic acid molecules further comprise at least five ribose residues, at
CC   least ten 2'-O-methyl modifications, phosphorothioate linkages on at
CC   least three of the 5' terminal nucleotides and a 3' end modification of a
CC   3'-3' inverted abasic moiety. Nucleic acid molecules SEQ ID NO 1 to 37080
CC   are claimed; however, SEQ ID NO 2194-2206 and 17502-17514 are not given
CC   in the specification. The present sequence is that of a nucleic acid
CC   molecule of the invention
XX
SQ   Sequence 17 BP; 6 A; 2 C; 8 G; 0 T; 1 U; 0 Other;

  Query Match             1.6%;  Score 13.8;  DB 1;  Length 17;
  Best Local Similarity   82.4%;  Pred. No. 1.7e+02;
  Matches   14;  Conservative    1;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        163 GGGAAGCATTAAAGGAC 179
              ||||||| : ||||||
Db          1 GGGAAGCAGUGAAGGAC 17


RESULT 218
ADB03682
ID   ADB03682 standard; DNA; 17 BP.
XX
AC   ADB03682;
XX
DT   20-NOV-2003  (first entry)
XX
DE   Human MDZ7 scanning oligonucleotide SEQ ID 4668.
XX
KW   Cytostatic; immunostimulant; gene therapy; vaccine; human;
KW   zinc finger protein; MDZ3; MDZ4; MDZ7; MDZ12; chromosome 7q22.1;
KW   chromosome 6p21.3-22.2; chromosome 16p11.2; chromosome 15q26.1; cancer;
KW   developmental disorder; ss.
XX
OS   Homo sapiens.
XX
PN   EP1281758-A2.
XX
PD   05-FEB-2003.
XX
PF   30-JUL-2002; 2002EP-00016874.
XX
PR   02-AUG-2001; 2001US-00922181.
XX
PA   (AEOM-) AEOMICA INC.
XX
PI   Shannon M,  Gu Y,  Nguyen C;
XX
DR   WPI; 2003-423107/40.
XX
PT   New zinc finger-containing proteins and nucleic acids, useful in
PT   manufacturing a medicament for treating or preventing a disorder
PT   associated with decreased or increased expression or activity of MDZ3,
PT   MDZ4, MDZ7 or MDZ12, e.g. cancer.
XX
PS   Example 8; SEQ ID NO 4668; 103pp; English.
XX
CC   The present invention relates to novel human zinc finger-containing
CC   proteins and their coding sequences: MDZ3, MDZ4, MDZ7, MDZ12. MDZ3 is
CC   encoded at chromosome 7q22.1, MDZ4 is encoded at chromosome 6p21.3-22.2,
CC   MDZ7 is encoded at chromosome 16p11.2 and MDZ12 is encoded at chromosome
CC   15q26.1. The MDZ3, MDZ4, MDZ7, and MDZ12 sequences are useful in therapy,
CC   or in manufacturing a medicament for treating or preventing a disorder
CC   associated with decreased or increased expression or activity of MDZ3,
CC   MDZ4, MDZ7, or MDZ12, e.g. cancer or developmental disorders. The nucleic
CC   acids and proteins are also useful for diagnosing or monitoring a disease
CC   caused by altered expression of MDZ3, MDZ4, MDZ7, or MDZ12. The nucleic
CC   acids can also be used as probes to detect and characterize gross
CC   alterations in MDZ3, MDZ4, MDZ7, or MDZ12 genetic locus. The probes are
CC   useful in constructing microarrays for measuring gene expression. The
CC   proteins are useful as therapeutic agents for gene therapy or as
CC   vaccines. The present sequence was used to illustrate the invention.
XX
SQ   Sequence 17 BP; 2 A; 8 C; 4 G; 3 T; 0 U; 0 Other;

  Query Match             1.6%;  Score 13.8;  DB 1;  Length 17;
  Best Local Similarity   88.2%;  Pred. No. 1.7e+02;
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        549 CTGAGGCCCCTTAACTC 565
              |||||||||||  | |||
Db          1 CTGAGGCCCCTCAGCTC 17


RESULT 219
ACD62281
ID   ACD62281 standard; RNA; 17 BP.
XX
```

```
AC   ACD62281;
XX
DT   23-SEP-2003  (first entry)
XX
DE   HCV minus strand DNAzyme substrate sequence #480.
XX
KW   Nucleic acid molecule; Hepatitis C virus; HCV; Hepatitis B virus; HBV;
KW   RNA stability; RNA expression; RNA synthesis; antisense;
KW   enzymatic nucleic acid; hammerhead ribozyme; DNAzyme; inozyme; zinzyme;
KW   amberzyme; G-cleaver ribozyme; decoy molecule; aptamer;
KW   HBV reverse transcriptase; Enhancer I region; viral replication;
KW   degenerative; disease state; HBV infection; HCV infection; cirrhosis;
KW   liver failure; hepatocellular carcinoma; hepatotropic; cytostatic;
KW   virucide; antiinflammatory; substrate; ss.
XX
OS   Hepatitis C virus.
XX
PN   WO200281494-A1.
XX
PD   17-OCT-2002.
XX
PF   26-MAR-2002; 2002WO-US009187.
XX
PR   26-MAR-2001; 2001US-00817879.
PR   08-JUN-2001; 2001US-00877478.
PR   08-JUN-2001; 2001US-0296876P.
PR   24-OCT-2001; 2001US-0335059P.
PR   05-DEC-2001; 2001US-0337055P.
XX
PA   (RIBO-) RIBOZYME PHARM INC.
PA   (BLAT/) BLATT L.
PA   (MACE/) MACEJAK D.
PA   (MCSW/) MCSWIGGEN J.
PA   (MORR/) MORRISSEY D.
PA   (PAVC/) PAVCO P.
PA   (LEEP/) LEE P.
PA   (DRAP/) DRAPER K.
PA   (ROBE/) ROBERTS E.
XX
PI   Blatt L,  Macejak D,  Mcswiggen J,  Morrissey D,  Pavco P,  Lee P;
PI   Draper K,  Roberts E;
XX
DR   WPI; 2003-229207/22.
XX
PT   Novel compound useful for treating cirrhosis, liver failure,
PT   hepatocellular carcinoma, or condition associated with hepatitis C virus
PT   infection.
XX
PS   Claim 1; Page 283; 387pp; English.
XX
CC   The present invention relates to nucleic acid molecules which modulate
CC   the synthesis, expression and/or stability of Hepatitis C virus (HCV) or
CC   Hepatitis B virus (HBV) RNA. The nucleic acid molecules include antisense
CC   and enzymatic nucleic acids such as hammerhead ribozymes, DNAzymes,
CC   inozymes, zinzymes, amberzymes, and G-cleaver ribozymes. Also disclosed
CC   are nucleic acid decoy molecules and aptamers that bind to HBV reverse
CC   transcriptase and/or HBV reverse transcriptase primer sequences, as well
CC   as oligonucleotides that specifically bind the Enhancer I region of HBV
CC   DNA. The nucleic acids may be used to modulate the expression of HBV
CC   genes and HBV viral replication. Also disclosed is a method for screening
CC   compounds and/or potential therapies directed against HBV, and compounds
CC   that modulate the expression and/or replication of HCV. The compounds and
CC   methods of the invention are useful for the treatment of degenerative and
CC   disease states related to HBV and HCV infection, replication and gene
CC   expression such as cirrhosis, liver failure, and hepatocellular
CC   carcinoma. The present sequence represents a substrate for one of the HCV
CC   DNAzyme or minus strand DNAzyme sequences disclosed in the present
CC   invention
XX
SQ   Sequence 17 BP; 6 A; 4 C; 6 G; 0 T; 1 U; 0 Other;

  Query Match             1.6%;  Score 13.8;  DB 1;  Length 17;
  Best Local Similarity   82.4%;  Pred. No. 1.7e+02;
  Matches   14;  Conservative    1;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        271 CAGAAAACACGGTGGGC 287
              ||||| ||||||:|| |
Db          1 CAGAAGACACGGUGGAC 17


RESULT 220
ADF62659/c
ID   ADF62659 standard; DNA; 17 BP.
XX
AC   ADF62659;
XX
DT   12-FEB-2004  (first entry)
XX
DE   Human PCCP1 DNA fragment SEQ ID 4-directed probe - SEQ ID 563.
XX
KW   chromatin organisation modifier; CHROMO domain; cytostatic; PCCP1;
KW   prostate cancer candidate protein 1; tumour; gene therapy; vaccine;
KW   human; ss; probe.
XX
OS   Homo sapiens.
XX
PN   WO2003050284-A1.
XX
PD   19-JUN-2003.
XX
PF   22-NOV-2002; 2002WO-US037506.
XX
PR   10-DEC-2001; 2001US-0339764P.
XX
PA   (AMSH ) AMERSHAM BIOSCIENCES SV CORP.
XX
PI   Guo J;
XX
DR   WPI; 2003-532916/50.
XX
PT   New prostate cancer candidate protein 1 (PCCP1), useful for preparing a
PT   composition for treating or preventing a disorder associated with
PT   decreased or increased expression or activity of PCCP1 e.g., tumor.
XX
PS   Example 2; SEQ ID NO 563; 164pp; English.
XX
CC   The invention relates to a novel isolated nucleic acid that encodes a
CC   protein with a chromatin organisation modifier (CHROMO) domain. The
CC   polynucleotide of the invention demonstrates cytostatic activity and may
CC   be useful for preparing a composition for treating or preventing a
CC   disorder associated with decreased or increased expression or activity of
CC   PCCP1 (prostate cancer candidate protein 1), such as a tumour, as well as
CC   during gene therapy and vaccine production procedures. The current
CC   sequence is that of the human PCCP1-related DNA fragment SEQ ID 4-
CC   directed probe of the invention. Note: The current sequence is not shown
CC   within the specification per se but was retrieved from the WipoWeb
CC   database.
XX
SQ   Sequence 17 BP; 8 A; 3 C; 3 G; 3 T; 0 U; 0 Other;

  Query Match             1.6%;  Score 13.8;  DB 1;  Length 17;
  Best Local Similarity   88.2%;  Pred. No. 1.7e+02;
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        635 TTGTGTGACTTTTTCAG 651
              || || ||||||||||
Db         17 TTCTGAGACTTTTTCAG 1


RESULT 221
ADL51188/c
ID   ADL51188 standard; RNA; 17 BP.
XX
AC   ADL51188;
XX
DT   20-MAY-2004  (first entry)
```

```
XX
DE   Human PTGDR substrate sequence #307.
XX
KW   antisense oligonucleotide; neurite growth inhibitor; NOGO;
KW   prostaglandin D2 receptor; PTGDR; IkappaB kinase; IKK;
KW   protein kinase PKR; cerebrovascular accident;
KW   central nervous system injury; CNS injury; spinal cord injury; cancer;
KW   melanoma; lymphoma; glioma; inflammatory disease; rheumatoid arthritis;
KW   restenosis; asthma; Crohn's disease; diabetes; obesity;
KW   autoimmune disease; lupus; multiple sclerosis; transplant rejection;
KW   graft rejection; ischaemia; reperfusion; glomerulonephritis; sepsis;
KW   allergy; asthma; allergic rhinitis; atopic dermatitis; human PTGDR;
KW   substrate; ds.
XX
OS   Unidentified.
XX
PN   WO200281628-A2.
XX
PD   17-OCT-2002.
XX
PF   03-APR-2002; 2002WO-US010512.
XX
PR   05-APR-2001; 2001US-00827395.
PR   29-MAY-2001; 2001US-0294412P.
PR   28-AUG-2001; 2001US-0315315P.
XX
PA   (RIBO-) RIBOZYME PHARM INC.
XX
PI   Blatt L,  Chowrira B,  Haeberli P,  Mcswiggen J,  Fosnaugh K;
XX
DR   WPI; 2003-058513/05.
XX
PT   Novel enzymatic nucleic acid that down-regulates expression of neurite
PT   growth inhibitor receptor, prostaglandin D2 receptor, IkappaB kinase or
PT   protein kinase PKR genes, for treating cancer and inflammatory disease.
XX
PS   Claim 161; SEQ ID NO 4721; 317pp; English.
XX
CC   The invention comprises nucleic acids (e.g. antisense oligonucleotides)
CC   that down regulate the expression or inhibit the function of a receptor
CC   for a neurite growth inhibitor, NOGO, prostaglandin D2 receptor (PTGDR),
CC   IkappaB kinase (IKK), or protein kinase PKR. The nucleic acids of the
CC   invention are useful for treating: cerebrovascular accident, central
CC   nervous system (CNS) injury, spinal cord injury, cancer (e.g. melanoma,
CC   lymphoma or glioma), inflammatory disease (e.g. rheumatoid arthritis,
CC   restenosis or asthma), Crohn's disease, diabetes, obesity, autoimmune
CC   disease, lupus, multiple sclerosis, transplant/graft rejection,
CC   ischaemia/reperfusion injury, glomerulonephritis, sepsis, and allergic
CC   conditions (e.g. asthma, allergic rhinitis or atopic dermatitis). The
CC   nucleic acids of the invention are also useful for down-regulating the
CC   expression of a target gene and as a diagnostic tool to examine genetic
CC   drifts and mutations within diseased cells or to detect the presence of a
CC   target RNA in a cell. The present RNA sequence represents a human PKR
CC   substrate sequence.
XX
SQ   Sequence 17 BP; 1 A; 10 C; 3 G; 0 T; 3 U; 0 Other;

  Query Match             1.6%;  Score 13.8;  DB 1;  Length 17;
  Best Local Similarity   88.2%;  Pred. No. 1.7e+02;
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy         87 TGCTGAAGGGCGACGGC 103
               ||| |||||||||| |||
Db         17 TGCGGAAGGGCGAGGGC 1


RESULT 222
ADL51187/c
ID   ADL51187 standard; RNA; 17 BP.
XX
AC   ADL51187;
XX
DT   20-MAY-2004  (first entry)
```

```
XX
DE   Human PTGDR substrate sequence #306.
XX
KW   antisense oligonucleotide; neurite growth inhibitor; NOGO;
KW   prostaglandin D2 receptor; PTGDR; IkappaB kinase; IKK;
KW   protein kinase PKR; cerebrovascular accident;
KW   central nervous system injury; CNS injury; spinal cord injury; cancer;
KW   melanoma; lymphoma; glioma; inflammatory disease; rheumatoid arthritis;
KW   restenosis; asthma; Crohn's disease; diabetes; obesity;
KW   autoimmune disease; lupus; multiple sclerosis; transplant rejection;
KW   graft rejection; ischaemia; reperfusion; glomerulonephritis; sepsis;
KW   allergy; asthma; allergic rhinitis; atopic dermatitis; human PTGDR;
KW   substrate; ds.
XX
OS   Unidentified.
XX
PN   WO200281628-A2.
XX
PD   17-OCT-2002.
XX
PF   03-APR-2002; 2002WO-US010512.
XX
PR   05-APR-2001; 2001US-00827395.
PR   29-MAY-2001; 2001US-0294412P.
PR   28-AUG-2001; 2001US-0315315P.
XX
PA   (RIBO-) RIBOZYME PHARM INC.
XX
PI   Blatt L,  Chowrira B,  Haeberli P,  Mcswiggen J,  Fosnaugh K;
XX
DR   WPI; 2003-058513/05.
XX
PT   Novel enzymatic nucleic acid that down-regulates expression of neurite
PT   growth inhibitor receptor, prostaglandin D2 receptor, IkappaB kinase or
PT   protein kinase PKR genes, for treating cancer and inflammatory disease.
XX
PS   Claim 161; SEQ ID NO 4720; 317pp; English.
XX
CC   The invention comprises nucleic acids (e.g. antisense oligonucleotides)
CC   that down regulate the expression or inhibit the function of a receptor
CC   for a neurite growth inhibitor, NOGO, prostaglandin D2 receptor (PTGDR),
CC   IkappaB kinase (IKK), or protein kinase PKR. The nucleic acids of the
CC   invention are useful for treating: cerebrovascular accident, central
CC   nervous system (CNS) injury, spinal cord injury, cancer (e.g. melanoma,
CC   lymphoma or glioma), inflammatory disease (e.g. rheumatoid arthritis,
CC   restenosis or asthma), Crohn's disease, diabetes, obesity, autoimmune
CC   disease, lupus, multiple sclerosis, transplant/graft rejection,
CC   ischaemia/reperfusion injury, glomerulonephritis, sepsis, and allergic
CC   conditions (e.g. asthma, allergic rhinitis or atopic dermatitis). The
CC   nucleic acids of the invention are also useful for down-regulating the
CC   expression of a target gene and as a diagnostic tool to examine genetic
CC   drifts and mutations within diseased cells or to detect the presence of a
CC   target RNA in a cell. The present RNA sequence represents a human PKR
CC   substrate sequence.
XX
SQ   Sequence 17 BP; 0 A; 9 C; 5 G; 0 T; 3 U; 0 Other;

  Query Match             1.6%;  Score 13.8;  DB 1;  Length 17;
  Best Local Similarity   88.2%;  Pred. No. 1.7e+02;
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy         91 GAAGGGCGACGGCCCAG 107
               ||||||||| ||||| |
Db         17 GAAGGGCGAGGGCCCCG 1


RESULT 223
ADL51536/c
ID   ADL51536 standard; RNA; 17 BP.
XX
AC   ADL51536;
XX
DT   20-MAY-2004  (first entry)
```

```
XX
DE   Human PTGDR substrate sequence #655.
XX
KW   antisense oligonucleotide; neurite growth inhibitor; NOGO;
KW   prostaglandin D2 receptor; PTGDR; IkappaB kinase; IKK;
KW   protein kinase PKR; cerebrovascular accident;
KW   central nervous system injury; CNS injury; spinal cord injury; cancer;
KW   melanoma; lymphoma; glioma; inflammatory disease; rheumatoid arthritis;
KW   restenosis; asthma; Crohn's disease; diabetes; obesity;
KW   autoimmune disease; lupus; multiple sclerosis; transplant rejection;
KW   graft rejection; ischaemia; reperfusion; glomerulonephritis; sepsis;
KW   allergy; asthma; allergic rhinitis; atopic dermatitis; human PTGDR;
KW   substrate; ds.
XX
OS   Unidentified.
XX
PN   WO200281628-A2.
XX
PD   17-OCT-2002.
XX
PF   03-APR-2002; 2002WO-US010512.
XX
PR   05-APR-2001; 2001US-00827395.
PR   29-MAY-2001; 2001US-0294412P.
PR   28-AUG-2001; 2001US-0315315P.
XX
PA   (RIBO-) RIBOZYME PHARM INC.
XX
PI   Blatt L,  Chowrira B,  Haeberli P,  Mcswiggen J,  Fosnaugh K;
XX
DR   WPI; 2003-058513/05.
XX
PT   Novel enzymatic nucleic acid that down-regulates expression of neurite
PT   growth inhibitor receptor, prostaglandin D2 receptor, IkappaB kinase or
PT   protein kinase PKR genes, for treating cancer and inflammatory disease.
XX
PS   Claim 161; SEQ ID NO 5069; 317pp; English.
XX
CC   The invention comprises nucleic acids (e.g. antisense oligonucleotides)
CC   that down regulate the expression or inhibit the function of a receptor
CC   for a neurite growth inhibitor, NOGO, prostaglandin D2 receptor (PTGDR),
CC   IkappaB kinase (IKK), or protein kinase PKR. The nucleic acids of the
CC   invention are useful for treating: cerebrovascular accident, central
CC   nervous system (CNS) injury, spinal cord injury, cancer (e.g. melanoma,
CC   lymphoma or glioma), inflammatory disease (e.g. rheumatoid arthritis,
CC   restenosis or asthma), Crohn's disease, diabetes, obesity, autoimmune
CC   disease, lupus, multiple sclerosis, transplant/graft rejection,
CC   ischaemia/reperfusion injury, glomerulonephritis, sepsis, and allergic
CC   conditions (e.g. asthma, allergic rhinitis or atopic dermatitis). The
CC   nucleic acids of the invention are also useful for down-regulating the
CC   expression of a target gene and as a diagnostic tool to examine genetic
CC   drifts and mutations within diseased cells or to detect the presence of a
CC   target RNA in a cell. The present RNA sequence represents a human PKR
CC   substrate sequence.
XX
SQ   Sequence 17 BP; 0 A; 9 C; 5 G; 0 T; 3 U; 0 Other;

  Query Match             1.6%;  Score 13.8;  DB 1;  Length 17;
  Best Local Similarity   88.2%;  Pred. No. 1.7e+02;
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy         89 CTGAAGGGCGACGGCCC 105
              | ||||||||| |||||
Db         17 CGGAAGGGCGAGGGCCC 1


RESULT 224
ADI85511
ID   ADI85511 standard; RNA; 17 BP.
XX
AC   ADI85511;
XX
DT   03-JUN-2004  (first entry)
XX
DE   HCV DNAzyme substrate sequence #2757.
XX
KW   ss; enzymatic nucleic acid; RNA cleavage; hepatitis C virus; HCV;
KW   HCV infection; type I interferon; DNAzyme.
XX
OS   Hepatitis C virus.
XX
PN   US2003125270-A1.
XX
PD   03-JUL-2003.
XX
PF   18-DEC-2000; 2000US-00740332.
XX
PR   18-DEC-2000; 2000US-00740332.
XX
PA   (BLAT/) BLATT L.
PA   (MCSW/) MCSWIGGEN J.
PA   (ROBE/) ROBERTS E.
PA   (PAVC/) PAVCO P A.
PA   (MACE/) MACEJACK D.
XX
PI   Blatt L,  Mcswiggen J,  Roberts E,  Pavco PA,  Macejack D;
XX
DR   WPI; 2004-031273/03.
XX
PT   Enzymatic nucleic acid molecules which specifically cleave RNA derived
PT   from hepatitis C virus (HCV), useful for the treatment of HCV infections,
PT   especially in combination with type I interferon therapy.
XX
PS   Claim 1; SEQ ID NO 2757; 198pp; English.
XX
CC   The invention relates to an enzymatic nucleic acid molecule which
CC   specifically cleaves RNA derived from hepatitis C virus (HCV), in which
CC   the binding arms of the enzymatic nucleic acid molecule comprises
CC   sequences complementary to any of the defined substrate sequences given
CC   in the specification. The nucleic acid molecule may be administered for
CC   the treatment of HCV infections, especially in combination with type I
CC   interferons. The present sequence represents a HCV DNAzyme substrate
CC   sequence.
XX
SQ   Sequence 17 BP; 6 A; 4 C; 6 G; 0 T; 1 U; 0 Other;

  Query Match             1.6%;  Score 13.8;  DB 1;  Length 17;
  Best Local Similarity   82.4%;  Pred. No. 1.7e+02;
  Matches   14;  Conservative    1;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        271 CAGAAAACACGGTGGGC 287
              ||||| ||||||:|| |
Db          1 CAGAAGACACGGUGGAC 17


RESULT 225
ACN72058
ID   ACN72058 standard; DNA; 17 BP.
XX
AC   ACN72058;
XX
DT   02-DEC-2004  (first entry)
XX
DE   Human GDMLP-1 probe SEQ ID NO:8960.
XX
KW   Human; ss; probe; myosin-like protein-1; hGDMLP-1;
KW   hGDMLP-1 agonist hGDMLP antagonist; hGDMLP inhibitor; heart disorder;
KW   skeletal muscle function.
XX
OS   Homo sapiens.
XX
PN   US2004137589-A1.
XX
PD   15-JUL-2004.
XX
PF   26-NOV-2003; 2003US-00723361.
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XX
PR   26-MAY-2000; 2000US-0207456P.
PR   21-SEP-2000; 2000US-0234687P.
PR   27-SEP-2000; 2000US-0236359P.
PR   04-OCT-2000; 2000GB-00024263.
PR   30-JAN-2001; 2001WO-US000661.
PR   30-JAN-2001; 2001WO-US000662.
PR   30-JAN-2001; 2001WO-US000663.
PR   30-JAN-2001; 2001WO-US000664.
PR   30-JAN-2001; 2001WO-US000665.
PR   30-JAN-2001; 2001WO-US000666.
PR   30-JAN-2001; 2001WO-US000667.
PR   30-JAN-2001; 2001WO-US000668.
PR   30-JAN-2001; 2001WO-US000669.
PR   30-JAN-2001; 2001WO-US000670.
PR   05-FEB-2001; 2001US-0266860P.
PR   25-MAY-2001; 2001US-00866108.
XX
PA   (GUYY/) GU Y.
PA   (JIYY/) JI Y.
PA   (PENN/) PENN S G.
PA   (HANZ/) HANZEL D K.
PA   (RANK/) RANK D.
PA   (CHEN/) CHEN W.
PA   (SHAN/) SHANNON M E.
XX
PI   Gu Y,  Ji Y,  Penn SG,  Hanzel DK,  Rank D,  Chen W,  Shannon ME;
XX
DR   WPI; 2004-533378/51.
XX
PT   Novel myosin-like protein-1, useful for treating or preventing disorder
PT   associated with decreased expression or activity of human genome-derived
PT   myosin-like protein-1 such as disorder of heart and/or skeletal muscle
PT   function.
XX
PS   Disclosure; SEQ ID NO 8960; 0pp; English.
XX
CC   The invention relates to a novel polypeptide (I) comprising a sequence
CC   (S1) of myosin-like protein-1 (hGDMLP-1) having 2568 amino acids fully
CC   defined in the specification, a fragment of at least 8 amino acids of
CC   (S1), 95% deviation from (S1) which are conservative substitutions, and
CC   65% identity to (S1). A polypeptide of the invention acts as a agonist or
CC   antagonist of hGDMLP-1, or as an inhibitor of hGDMLP-1 activity. A
CC   pharmaceutical composition of the invention is useful for treating or
CC   preventing a disorder associated with decreased expression or activity of
CC   hGDMLP-1, such as a disorder of heart and/or skeletal muscle function.
CC   The present sequence represents a 17-mer nucleotide, used in the
CC   invention for scanning the sequence represented in ACN63103
XX
SQ   Sequence 17 BP; 5 A; 4 C; 6 G; 2 T; 0 U; 0 Other;

  Query Match             1.6%;  Score 13.8;  DB 1;  Length 17;
  Best Local Similarity   88.2%;  Pred. No. 1.7e+02;
  Matches   15;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        183 CTGAAGGCCTGCATGGA 199
              |||||||||  ||||||
Db          1 CTGAAGGCCGACATGGA 17


RESULT 226
AAF50921
ID   AAF50921 standard; DNA; 15 BP.
XX
AC   AAF50921;
XX
DT   30-MAR-2001  (first entry)
XX
DE   IGF-I oligonucleotide #1881.
XX
KW   Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic;
KW   cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid;
KW   skin disorder; Insulin-like Growth Factor 1 receptor; IGF-1; pityriasis;
KW   IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris;
KW   growth factor mediated cell proliferation; ichthyosis; serborrhoea; ruba;
KW   keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease;
KW   hyperneovascular condition; hyperplasia; kidney disease;
KW   neovascular condition of the retina; ss.
XX
OS   Homo sapiens.
XX
PN   WO200078341-A1.
XX
PD   28-DEC-2000.
XX
PF   21-JUN-2000; 2000WO-AU000693.
XX
PR   21-JUN-1999;   99US-0140345P.
XX
PA   (MURD-) MURDOCH CHILDRENS RES INST.
XX
PI   Wraight CJ,  Werther GA,  Edmondson SR;
XX
DR   WPI; 2001-041421/05.
XX
PT   Ameliorating the effects of a disorder, e.g. psoriasis, by administering
PT   UV (ultra-violet) treatment (optional) and an antisense nucleic acid that
PT   inhibits or reduces growth factor mediated cell proliferation and/or
PT   inflammation.
XX
PS   Example 8; Page 73; 201pp; English.
XX
CC   The present invention relates to a method for ameliorating the effects of
CC   skin disorders. The method comprises contacting the skin with an
CC   antisense oligonucleotide, (for Insulin-like Growth Factor [IGF]-1
CC   receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of
CC   inhibiting or reducing growth factor mediated cell proliferation,
CC   inflammation and/or other disorders. The present sequence is an
CC   oligonucleotide which can be used to design the antisense
CC   oligonucleotides of the present invention (see AAF45151 and AAF45153-
CC   F45161). The method is useful for ameliorating the effects of psoriasis,
CC   ichthyosis, pityriasis, ruba, pilaris, serborrhoea, keloids, keratosis,
CC   neoplasias, scleroderma, warts, benign growths, cancers of the skin, a
CC   hyperneovascular condition such as a neovascular condition of the retina,
CC   brain or skin, growth factor-mediated malignancies, other sclerotic
CC   disease, kidney disease, hyperproliferation of the inside of blood
CC   vessels or any other hyperplasia
XX
SQ   Sequence 15 BP; 2 A; 5 C; 3 G; 5 T; 0 U; 0 Other;

  Query Match             1.5%;  Score 13.4;  DB 1;  Length 15;
  Best Local Similarity   93.3%;  Pred. No. 1.6e+02;
  Matches   14;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        531 CATTCCCTTGGATGT 545
              ||||||||||| ||
Db          1 CATTCCCTTGGACGT 15


RESULT 227
AAF46599
ID   AAF46599 standard; DNA; 15 BP.
XX
AC   AAF46599;
XX
DT   30-MAR-2001  (first entry)
XX
DE   IGFBP3 oligonucleotide #19.
XX
KW   Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic;
KW   cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid;
KW   skin disorder; Insulin-like Growth Factor 1 receptor; IGF-1; pityriasis;
KW   IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris;
KW   growth factor mediated cell proliferation; ichthyosis; serborrhoea; ruba;
KW   keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease;
KW   hyperneovascular condition; hyperplasia; kidney disease;
```

KW neovascular condition of the retina; ss.
XX
OS Homo sapiens.
XX
PN WO200078341-A1.
XX
PD 28-DEC-2000.
XX
PF 21-JUN-2000; 2000WO-AU000693.
XX
PR 21-JUN-1999; 99US-0140345P.
XX
PA (MURD-) MURDOCH CHILDRENS RES INST.
XX
PI Wraight CJ, Werther GA, Edmondson SR;
XX
DR WPI; 2001-041421/05.
XX
PT Ameliorating the effects of a disorder, e.g. psoriasis, by administering
PT UV (ultra-violet) treatment (optional) and an antisense nucleic acid that
PT inhibits or reduces growth factor mediated cell proliferation and/or
PT inflammation.
XX
PS Example 7; Page 44; 201pp; English.
XX
CC The present invention relates to a method for ameliorating the effects of
CC skin disorders. The method comprises contacting the skin with an
CC antisense oligonucleotide, (for Insulin-like Growth Factor [IGF]-1
CC receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of
CC inhibiting or reducing growth factor mediated cell proliferation,
CC inflammation and/or other disorders. The present sequence is an
CC oligonucleotide which can be used to design the antisense
CC oligonucleotides of the present invention (see AAF45151 and AAF45153-
CC F45161). The method is useful for ameliorating the effects of psoriasis,
CC ichthyosis, pityriasis, ruba, pilaris, serborrhoea, keloids, keratosis,
CC neoplasias, scleroderma, warts, benign growths, cancers of the skin, a
CC hyperneovascular condition such as a neovascular condition of the retina,
CC brain or skin, growth factor-mediated malignancies, other sclerotic
CC disease, kidney disease, hyperproliferation of the inside of blood
CC vessels or any other hyperplasia
XX
SQ Sequence 15 BP; 2 A; 6 C; 3 G; 4 T; 0 U; 0 Other;

Query Match 1.5%; Score 13.4; DB 1; Length 15;
Best Local Similarity 93.3%; Pred. No. 1.6e+02;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 190 CCTGCATGGATTCCA 204
||||| ||||||||
Db 1 CCTGCCTGGATTCCA 15

RESULT 228
ADO43607
ID ADO43607 standard; DNA; 15 BP.
XX
AC ADO43607;
XX
DT 29-JUL-2004 (first entry)
XX
DE Mutant DNA fragment of SOD-1 where L26S mutation occurs.
XX
KW DNAzyme; dominantly inherited disorder; achondroplasia;
KW amyotrophic lateral sclerosis; Marfan syndrome; hypercholesterolemia;
KW osteogenesis imperfecta; SCCMS; ss; superoxide disutase; SOD-1.
XX
OS Homo sapiens.
XX
PN WO2004038019-A2.
XX
PD 06-MAY-2004.
XX
PF 23-OCT-2003; 2003WO-GB004614.
XX
PR 23-OCT-2002; 2002GB-00024663.
XX
PA (ISIS-) ISIS INNOVATION LTD.
XX
PI Beeson D, Wood M, Abdelgany A;
XX
DR WPI; 2004-365523/34.
XX
PT New DNAzyme that cleaves mutant polynucleotides, useful in treating a
PT dominantly inherited disorder associated with a mutant allele, such as
PT achondroplasia, amyotrophic lateral sclerosis, Marfan syndrome and
PT hypercholesterolemia.
XX
PS Disclosure; Page 8; 24pp; English.
XX
CC The specification describes a DNAzyme which selectively cleaves a mutant
CC polynucleotide by cleaving at a site remote from the mutation site. The
CC DNAzyme binds selectively to a mutant allele or its expressed product,
CC and comprises a central catalytic motif (Helix II) and two flanking
CC regions (helix I and III) where at least one of the flanking regions has
CC a polynucleotide sequence complementary to a region that includes the
CC mutation in the mutant allele or to that of the expressed product. Both
CC flanking regions are complementary to mutated regions of the mutant
CC allele or the expressed product. The complement of the mutation is 2 or 3
CC nucleotides upstream or downstream of the site of cleavage, preferably in
CC helix I. Helix I and III are of different lengths, where helix I is
CC shorter than helix III, and their length is 21-7 or 15-8 nucleotides.
CC Helix I preferably comprises 9 nucleotides and helix III 13 nucleotides.
CC At least one of the flanking regions comprises ribonucleic acid. The
CC DNAzyme further comprises a stem-loop structure at either or both
CC terminus. The DNAzyme is useful in therapy, in particular for the
CC manufacture of a medicament for the treatment of a disorder associated
CC with a mutant allele in a patient, where the DNAzyme comprises a central
CC catalytic motif and two flanking substrate-binding regions, and where at
CC least one flanking region binds at the site of mutation in the mutant
CC allele or its expressed product and the catalytic motif cleaves at a site
CC remote from the site of mutation. The disorder is a dominantly inherited
CC disorder, such as achondroplasia, amyotrophic lateral sclerosis with SOD1
CC mutation, Marfan syndrome, hypercholesterolemia, osteogenesis imperfecta
CC and SCCMS. ADO43606-ADO43607 represent the wild type and mutant DNA
CC fragments, respectively, of the Cu/Zn superoxide disutase (SOD-1) gene
CC where a L26S mutation occurs, and causes amyotrophic lateral sclerosis.
CC These sequences are suitable for the design of DNAzymes of the invention
CC (see ADO43608).
XX
SQ Sequence 15 BP; 5 A; 3 C; 5 G; 2 T; 0 U; 0 Other;

Query Match 1.5%; Score 13.4; DB 1; Length 15;
Best Local Similarity 93.3%; Pred. No. 1.6e+02;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 437 GATGACTTGGGCAAA 451
||||||| |||||||
Db 1 GATGACTCGGGCAAA 15

RESULT 229
ADO43602
ID ADO43602 standard; DNA; 15 BP.
XX
AC ADO43602;
XX
DT 29-JUL-2004 (first entry)
XX
DE DNA fragment from DNAzyme for SOD-1 G12R mutation.
XX
KW DNAzyme; dominantly inherited disorder; achondroplasia;
KW amyotrophic lateral sclerosis; Marfan syndrome; hypercholesterolemia;
KW osteogenesis imperfecta; SCCMS; ss; superoxide disutase; SOD-1.
XX
OS Homo sapiens.
XX

PN WO2004038019-A2.
XX
PD 06-MAY-2004.
XX
PF 23-OCT-2003; 2003WO-GB004614.
XX
PR 23-OCT-2002; 2002GB-00024663.
XX
PA (ISIS-) ISIS INNOVATION LTD.
XX
PI Beeson D, Wood M, Abdelgany A;
XX
DR WPI; 2004-365523/34.
XX
PT New DNAzyme that cleaves mutant polynucleotides, useful in treating a
PT dominantly inherited disorder associated with a mutant allele, such as
PT achondroplasia, amyotrophic lateral sclerosis, Marfan syndrome and
PT hypercholesterolemia.
XX
PS Disclosure; Page 7; 24pp; English.
XX
CC The specification describes a DNAzyme which selectively cleaves a mutant
CC polynucleotide by cleaving at a site remote from the mutation site. The
CC DNAzyme binds selectively to a mutant allele or its expressed product,
CC and comprises a central catalytic motif (Helix II) and two flanking
CC regions (helix I and III) where at least one of the flanking regions has
CC a polynucleotide sequence complementary to a region that includes the
CC mutation in the mutant allele or to that of the expressed product. Both
CC flanking regions are complementary to mutated regions of the mutant
CC allele or the expressed product. The complement of the mutation is 2 or 3
CC nucleotides upstream or downstream of the site of cleavage, preferably in
CC helix I. Helix I and III are of different lengths, where helix I is
CC shorter than helix III, and their length is 21-7 or 15-8 nucleotides.
CC Helix I preferably comprises 9 nucleotides and helix III 13 nucleotides.
CC At least one of the flanking regions comprises ribonucleic acid. The
CC DNAzyme further comprises a stem-loop structure at either or both
CC terminus. The DNAzyme is useful in therapy, in particular for the
CC manufacture of a medicament for the treatment of a disorder associated
CC with a mutant allele in a patient, where the DNAzyme comprises a central
CC catalytic motif and two flanking substrate-binding regions, and where at
CC least one flanking region binds at the site of mutation in the mutant
CC allele or its expressed product and the catalytic motif cleaves at a site
CC remote from the site of mutation. The disorder is a dominantly inherited
CC disorder, such as achondroplasia, amyotrophic lateral sclerosis with SOD1
CC mutation, Marfan syndrome, hypercholesterolemia, osteogenesis imperfecta
CC and SCCMS. The present sequence represents a fragment from a DNAzyme for
CC the Cu/Zn superoxide disutase (SOD-1) gene where a G12R mutation occurs
CC and causes amyotrophic lateral sclerosis.
XX
SQ Sequence 15 BP; 2 A; 6 C; 6 G; 1 T; 0 U; 0 Other;

```
  Query Match             1.5%;  Score 13.4;  DB 1;  Length 15;
  Best Local Similarity   93.3%;  Pred. No. 1.6e+02;
  Matches   14;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy         95 GGCGACGGCCCAGTG 109
              |||||| ||||||||
Db          1 GGCGACCGCCCAGTG 15
```

RESULT 230
AAS15510/c
ID AAS15510 standard; DNA; 16 BP.
XX
AC AAS15510;
XX
DT 16-JAN-2002 (first entry)
XX
DE N-acetyltransferase 2 (NAT2) G191A SNP hybridisation probe #7.
XX
KW N-acetyltransferase 2; NAT2; human; genotyping; SNP; G191A; probe;
KW single nucleotide polymorphism; ss.
XX
OS Synthetic.
XX
FH Key Location/Qualifiers
FT variation replace(7,C)
FT /*tag= a
FT /standard_name= "Single nucleotide polymorphism"
FT variation replace(8,G)
FT /*tag= b
FT /standard_name= "Single nucleotide polymorphism"
XX
PN WO200166804-A2.
XX
PD 13-SEP-2001.
XX
PF 09-MAR-2001; 2001WO-US007775.
XX
PR 09-MAR-2000; 2000US-00521983.
PR 10-JUL-2000; 2000US-00613517.
XX
PA (PROT-) PROTOGENE LAB INC.
XX
PI Cronin MT, Frueh F, Brennan TM;
XX
DR WPI; 2001-616243/71.
XX
PT Determining sequence variation in, or monitoring expression of genes in
PT target nucleic acid for high-throughput genotyping of (un)known
PT polymorphisms/mutations, comprises hybridization pattern differences
PT between target and probe sequences.
XX
PS Example 5; Page 35; 60pp; English.
XX
CC The invention relates to a method of simultaneously determining the
CC presence of 2 or more sequence variations in target nucleic acids, or
CC simultaneously monitoring expression of 2 or more genes. The method
CC comprises determining differences in hybridisation between the target
CC nucleic acid and immobilised probes, where differences in hybridisation
CC between indicates sequence variations or transcription levels. The method
CC is used for simultaneously determining the presence or absence of two or
CC more sequence variations in target nucleic acids or simultaneously
CC monitoring expression of two or more genes in target nucleic acids. The
CC methods are applicable to high-throughput genotyping of known and unknown
CC polymorphisms and mutations. The method maximises the information yield
CC of hybridisation-based array applications by increasing the number of
CC informative array-immobilised polynucleotide probes. The present sequence
CC represents N-acetyltransferase 2 (NAT2) G191A single nucleotide
CC polymorphism (SNP) hybridisation probe #7
XX
SQ Sequence 16 BP; 1 A; 6 C; 3 G; 6 T; 0 U; 0 Other;

```
  Query Match             1.5%;  Score 13.4;  DB 1;  Length 16;
  Best Local Similarity   93.3%;  Pred. No. 1.7e+02;
  Matches   14;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        272 AGAAAACACGGTGGG 286
              ||||| |||||||||
Db         15 AGAAACCACGGTGGG 1
```

RESULT 231
ABT13505/c
ID ABT13505 standard; DNA; 16 BP.
XX
AC ABT13505;
XX
DT 07-FEB-2003 (first entry)
XX
DE Liver regeneration-related gene panel PCR primer #33.
XX
KW PCR; primer; ss; liver regeneration; gene panel; expression profile;
KW drug screening; drug development; hepatitis; liver transplantation.
XX
OS Unidentified.

XX
PN WO200277222-A1.
XX
PD 03-OCT-2002.
XX
PF 13-MAR-2002; 2002WO-JP002372.
XX
PR 13-MAR-2001; 2001JP-00070940.
XX
PA (AJIN) AJINOMOTO CO INC.
XX
PI Yokoya F, Okutsu T, Mori M, Takahara Y, Fukuda H, Aburatani H;
PI Sonaka I;
XX
DR WPI; 2003-018922/01.
XX
PT Gene panel participating in liver regeneration, applicable in providing
PT expression data, diagnosis and development of drugs for promoting liver
PT regeneration e.g. after transplantation or removal of liver during
PT cancer.
XX
PS Claim 19; Page 55; 101pp; Japanese.
XX
CC The invention comprises a gene panel constructed from the expression
CC profile of known genes which show a change in expression level between
CC normal liver cells and liver cells under regeneration. The gene panel is
CC useful for providing expression data and screening/development of drugs
CC for liver regeneration (e.g. when treating hepatitis, after
CC transplantation or removal of the liver during cancer or hepatitis
CC therapy). The present DNA sequence represents a PCR primer used in the
CC invention
XX
SQ Sequence 16 BP; 3 A; 5 C; 4 G; 4 T; 0 U; 0 Other;

Query Match 1.5%; Score 13.4; DB 1; Length 16;
Best Local Similarity 93.3%; Pred. No. 1.7e+02;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 310 TGGAGACTTGGGCAA 324
|||| |||||||||||
Db 15 TGGACACTTGGGCAA 1

RESULT 232
ABZ68236
ID ABZ68236 standard; DNA; 16 BP.
XX
AC ABZ68236;
XX
DT 07-APR-2003 (first entry)
XX
DE Probe/PCR primer for conserved region of the spo0A gene of bacteria.
XX
KW spo0A gene; spore-forming bacteria; Bacillus; Clostridium;
KW sporulation gene; paper product; paper making; probe; PCR; primer; ss.
XX
OS Synthetic.
XX
PN WO200292853-A1.
XX
PD 21-NOV-2002.
XX
PF 15-MAY-2001; 2001WO-US015793.
XX
PR 15-MAY-2001; 2001WO-US015793.
XX
PA (HERC) HERCULES INC.
XX
PI Breen AW, Singleton FL;
XX
DR WPI; 2003-175079/17.
XX
PT Testing a sample for the presence of spore forming bacteria, by combining
PT two primers with sample, hybridizing the primer to the target spore
PT forming bacterial spo0A gene, and detecting the hybridized product.
XX
PS Claim 5; Page 16; 40pp; English.
XX
CC PCR primers and probes ABZ68235-42 are based on highly conserved regions
CC of the spo0A gene of the spore-forming bacteria Bacillus and Clostridium.
CC They are used for detecting the presence of spore-forming bacteria in a
CC sample. The probes are useful for testing a sample comprising air, soil,
CC water, blood, faecal matter, starch, protein or an epichlorohydrin
CC reaction product for the presence of spore forming bacteria. They are
CC useful for the systemic identification of sporulation genes in spore-
CC forming bacteria. They are useful for detecting spore forming bacteria
CC such as Bacillus megaterium, B. lichenformis or B. pertussis in paper
CC products and paper making processes, protein-containing samples, and
CC medical diagnostic applications
XX
SQ Sequence 16 BP; 8 A; 2 C; 3 G; 3 T; 0 U; 0 Other;

Query Match 1.5%; Score 13.4; DB 1; Length 16;
Best Local Similarity 93.3%; Pred. No. 1.7e+02;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 429 AAAAAGCAGATGACT 443
||||||||| |||||
Db 2 AAAAAGCAGTTGACT 16

RESULT 233
ADJ92751
ID ADJ92751 standard; DNA; 16 BP.
XX
AC ADJ92751;
XX
DT 06-MAY-2004 (first entry)
XX
DE Bacillus cereus spo0A gene amplifying forward PCR primer #1.
XX
KW Sporulation gene; spore forming bacteria; SFB; paper pulp; spo0A gene;
KW PCR; primer; ss.
XX
OS Bacillus cereus.
XX
PN US2004014122-A1.
XX
PD 22-JAN-2004.
XX
PF 27-JUN-2003; 2003US-00608062.
XX
PR 27-MAY-1998; 98US-00085359.
PR 20-JUL-1999; 99US-00356677.
PR 27-JAN-2000; 2000US-00492135.
XX
PA (BREE/) BREEN A W.
PA (SING/) SINGLETON F L.
XX
PI Breen AW, Singleton FL;
XX
DR WPI; 2004-098822/10.
XX
PT Novel primer pair useful for identifying sporulation genes in spore
PT forming bacteria and detecting the presence of spore forming bacteria in
PT samples e.g. paper pulp.
XX
PS Claim 1; SEQ ID NO 2; 19pp; English.
XX
CC The invention relates to methods for the systematic identification of
CC sporulation genes in spore forming bacteria (SFB). The method is useful
CC for identifying sporulation genes in spore forming bacteria. It is also
CC useful for detecting the presence of SFB in sample e.g., paper pulp. The
CC present sequence is a PCR primer used for amplifying spore forming
CC bacteria spo0A gene. This sequence is used to illustrate the method of
CC the invention.

```
XX
SQ   Sequence 16 BP; 8 A; 2 C; 3 G; 3 T; 0 U; 0 Other;

  Query Match             1.5%;  Score 13.4;  DB 1;  Length 16;
  Best Local Similarity   93.3%;  Pred. No. 1.7e+02;
  Matches   14;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        429 AAAAAGCAGATGACT 443
              ||||||||| |||||
Db          2 AAAAAGCAGTTGACT 16


RESULT 234
AAC88558
ID   AAC88558 standard; RNA; 13 BP.
XX
AC   AAC88558;
XX
DT   02-MAR-2001  (first entry)
XX
DE   Anti-SOD-1 295 coding sequence fragment.
XX
KW   Ribozyme; retinal degradation; retinal disease; learning; memory;
KW   amylotropic lateral sclerosis; tumour suppression; ss.
XX
OS   Mus sp.
XX
PN   WO200066780-A2.
XX
PD   09-NOV-2000.
XX
PF   28-APR-2000; 2000WO-US011509.
XX
PR   30-APR-1999;   99US-0131942P.
XX
PA   (UYFL ) UNIV FLORIDA.
XX
PI   Lewin AS,  Muzyczka N,  Hauswirth WW,  Teschendorf C,  Burger C;
XX
DR   WPI; 2000-687548/67.
XX
PT   Novel methods for identifying genes with selected functions comprising
PT   contacting genes with a library of ribozymes, useful for identifying
PT   genes involved in, e.g. retinal disease, learning or memory and tumor
PT   suppression.
XX
PS   Claim 16; Fig 36; 111pp; English.
XX
CC   The present invention relates to a method for identifying a gene with a
CC   selected function comprising contacting genes with a library of ribozymes
CC   and identifying at least 1 ribozyme that alters the selected function of
CC   the gene. The present sequence is a target sequence used in the present
CC   invention. The methods (and ribozymes) are useful for identifying novel
CC   genes involved in retinal degradation, retinal disease, learning or
CC   memory, amylotropic lateral sclerosis or tumour suppression, and for
CC   producing non-human animal models of diseases
XX
SQ   Sequence 13 BP; 3 A; 1 C; 3 G; 0 T; 6 U; 0 Other;

  Query Match             1.5%;  Score 13;  DB 1;  Length 13;
  Best Local Similarity   53.8%;  Pred. No. 1.5e+02;
  Matches    7;  Conservative    6;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        354 ATGTGTCTATTGA 366
              |:|:|:|:|::||
Db          1 AUGUGUCUAUUGA 13


RESULT 235
AAC88562
ID   AAC88562 standard; RNA; 13 BP.
XX
AC   AAC88562;
XX
DT   02-MAR-2001  (first entry)
XX
DE   Anti-SOD-1 429 coding sequence fragment.
XX
KW   Ribozyme; retinal degradation; retinal disease; learning; memory;
KW   amylotropic lateral sclerosis; tumour suppression; ss.
XX
OS   Mus sp.
XX
PN   WO200066780-A2.
XX
PD   09-NOV-2000.
XX
PF   28-APR-2000; 2000WO-US011509.
XX
PR   30-APR-1999;   99US-0131942P.
XX
PA   (UYFL ) UNIV FLORIDA.
XX
PI   Lewin AS,  Muzyczka N,  Hauswirth WW,  Teschendorf C,  Burger C;
XX
DR   WPI; 2000-687548/67.
XX
PT   Novel methods for identifying genes with selected functions comprising
PT   contacting genes with a library of ribozymes, useful for identifying
PT   genes involved in, e.g. retinal disease, learning or memory and tumor
PT   suppression.
XX
PS   Claim 16; Fig 36; 111pp; English.
XX
CC   The present invention relates to a method for identifying a gene with a
CC   selected function comprising contacting genes with a library of ribozymes
CC   and identifying at least 1 ribozyme that alters the selected function of
CC   the gene. The present sequence is a target sequence used in the present
CC   invention. The methods (and ribozymes) are useful for identifying novel
CC   genes involved in retinal degradation, retinal disease, learning or
CC   memory, amylotropic lateral sclerosis or tumour suppression, and for
CC   producing non-human animal models of diseases
XX
SQ   Sequence 13 BP; 2 A; 1 C; 6 G; 0 T; 4 U; 0 Other;

  Query Match             1.5%;  Score 13;  DB 1;  Length 13;
  Best Local Similarity   69.2%;  Pred. No. 1.5e+02;
  Matches    9;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        488 GGAAGTCGTTTGG 500
              |||||:||:::||
Db          1 GGAAGUCGUUUGG 13


RESULT 236
AAC88560
ID   AAC88560 standard; RNA; 13 BP.
XX
AC   AAC88560;
XX
DT   02-MAR-2001  (first entry)
XX
DE   Anti-SOD-1 359 coding sequence fragment.
XX
KW   Ribozyme; retinal degradation; retinal disease; learning; memory;
KW   amylotropic lateral sclerosis; tumour suppression; ss.
XX
OS   Mus sp.
XX
PN   WO200066780-A2.
XX
PD   09-NOV-2000.
XX
PF   28-APR-2000; 2000WO-US011509.
XX
PR   30-APR-1999;   99US-0131942P.
```

```
XX
PA   (UYFL ) UNIV FLORIDA.
XX
PI   Lewin AS,  Muzyczka N,  Hauswirth WW,  Teschendorf C,  Burger C;
XX
DR   WPI; 2000-687548/67.
XX
PT   Novel methods for identifying genes with selected functions comprising
PT   contacting genes with a library of ribozymes, useful for identifying
PT   genes involved in, e.g. retinal disease, learning or memory and tumor
PT   suppression.
XX
PS   Claim 16; Fig 36; 111pp; English.
XX
CC   The present invention relates to a method for identifying a gene with a
CC   selected function comprising contacting genes with a library of ribozymes
CC   and identifying at least 1 ribozyme that alters the selected function of
CC   the gene. The present sequence is a target sequence used in the present
CC   invention. The methods (and ribozymes) are useful for identifying novel
CC   genes involved in retinal degradation, retinal disease, learning or
CC   memory, amylotropic lateral sclerosis or tumour suppression, and for
CC   producing non-human animal models of diseases
XX
SQ   Sequence 13 BP; 3 A; 2 C; 5 G; 0 T; 3 U; 0 Other;

  Query Match             1.5%;  Score 13;  DB 1;  Length 13;
  Best Local Similarity   76.9%;  Pred. No. 1.5e+02;
  Matches   10;  Conservative    3;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        418 GGTGGTCCATGAA 430
              ||:||:|||:|||
Db          1 GGUGGUCCAUGAA 13


RESULT 237
AAC88556
ID   AAC88556 standard; RNA; 13 BP.
XX
AC   AAC88556;
XX
DT   02-MAR-2001  (first entry)
XX
DE   Anti-SOD-1 186 coding sequence fragment.
XX
KW   Ribozyme; retinal degradation; retinal disease; learning; memory;
KW   amylotropic lateral sclerosis; tumour suppression; ss.
XX
OS   Mus sp.
XX
PN   WO200066780-A2.
XX
PD   09-NOV-2000.
XX
PF   28-APR-2000; 2000WO-US011509.
XX
PR   30-APR-1999;   99US-0131942P.
XX
PA   (UYFL ) UNIV FLORIDA.
XX
PI   Lewin AS,  Muzyczka N,  Hauswirth WW,  Teschendorf C,  Burger C;
XX
DR   WPI; 2000-687548/67.
XX
PT   Novel methods for identifying genes with selected functions comprising
PT   contacting genes with a library of ribozymes, useful for identifying
PT   genes involved in, e.g. retinal disease, learning or memory and tumor
PT   suppression.
XX
PS   Claim 16; Fig 36; 111pp; English.
XX
CC   The present invention relates to a method for identifying a gene with a
CC   selected function comprising contacting genes with a library of ribozymes
CC   and identifying at least 1 ribozyme that alters the selected function of
CC   the gene. The present sequence is a target sequence used in the present
CC   invention. The methods (and ribozymes) are useful for identifying novel
CC   genes involved in retinal degradation, retinal disease, learning or
CC   memory, amylotropic lateral sclerosis or tumour suppression, and for
CC   producing non-human animal models of diseases
XX
SQ   Sequence 13 BP; 2 A; 5 C; 3 G; 0 T; 3 U; 0 Other;

  Query Match             1.5%;  Score 13;  DB 1;  Length 13;
  Best Local Similarity   76.9%;  Pred. No. 1.5e+02;
  Matches   10;  Conservative    3;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        245 GCAGGTCCTCACT 257
              |||||:||:|||:
Db          1 GCAGGUCCUCACU 13


RESULT 238
ABF54653
ID   ABF54653 standard; DNA; 13 BP.
XX
AC   ABF54653;
XX
DT   21-FEB-2002  (first entry)
XX
DE   Oligonucleotide SEQ ID NO 154650 for detecting SNP TSC0039096.
XX
KW   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW   peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW   central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS   Homo sapiens.
XX
PN   WO200177384-A2.
XX
PD   18-OCT-2001.
XX
PF   06-APR-2001; 2001WO-IB000713.
XX
PR   07-APR-2000; 2000DE-01019173.
XX
PA   (EPIG-) EPIGENOMICS AG.
XX
PI   Olek A,  Piepenbrock C,  Berlin K;
XX
DR   WPI; 2001-657177/75.
XX
PT   Set of oligonucleotides, useful for diagnosis and cell typing, is
PT   designed to detect single-nucleotide polymorphisms and cytosine
PT   methylation status.
XX
PS   Claim 1; SEQ ID NO 154650; 29pp + Sequence Listing; German.
XX
CC   This invention describes novel oligonucleotide primers or peptide nucleic
CC   acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC   and cytosine methylation status in chemically pretreated genomic DNA. The
CC   oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC   range of diseases including immune system, gastrointestinal, respiratory,
CC   central nervous system, cardiovascular and metabolic disorders. The
CC   oligomers are also used for detecting cell type differentiation. ABC00010
CC   -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
CC   represent the oligomers described in the invention. NOTE: The sequence
CC   data for this patent did not form part of the printed specification, but
CC   was obtained in electronic format from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences
XX
SQ   Sequence 13 BP; 4 A; 4 C; 0 G; 5 T; 0 U; 0 Other;

  Query Match             1.5%;  Score 13;  DB 1;  Length 13;
  Best Local Similarity   100.0%;  Pred. No. 1.5e+02;
  Matches   13;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        527 TAAACATTCCCTT 539
```

```
                 ||||||||||||||
Db          1 TAAACATTCCCTT 13


RESULT 239
ABF56543/c
ID   ABF56543 standard; DNA; 13 BP.
XX
AC   ABF56543;
XX
DT   21-FEB-2002  (first entry)
XX
DE   Oligonucleotide SEQ ID NO 156540 for detecting SNP TSC0039466.
XX
KW   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW   peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW   central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS   Homo sapiens.
XX
PN   WO200177384-A2.
XX
PD   18-OCT-2001.
XX
PF   06-APR-2001; 2001WO-IB000713.
XX
PR   07-APR-2000; 2000DE-01019173.
XX
PA   (EPIG-) EPIGENOMICS AG.
XX
PI   Olek A,  Piepenbrock C,  Berlin K;
XX
DR   WPI; 2001-657177/75.
XX
PT   Set of oligonucleotides, useful for diagnosis and cell typing, is
PT   designed to detect single-nucleotide polymorphisms and cytosine
PT   methylation status.
XX
PS   Claim 1; SEQ ID NO 156540; 29pp + Sequence Listing; German.
XX
CC   This invention describes novel oligonucleotide primers or peptide nucleic
CC   acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC   and cytosine methylation status in chemically pretreated genomic DNA. The
CC   oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC   range of diseases including immune system, gastrointestinal, respiratory,
CC   central nervous system, cardiovascular and metabolic disorders. The
CC   oligomers are also used for detecting cell type differentiation. ABC00010
CC   -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
CC   represent the oligomers described in the invention. NOTE: The sequence
CC   data for this patent did not form part of the printed specification, but
CC   was obtained in electronic format from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences
XX
SQ   Sequence 13 BP; 8 A; 2 C; 0 G; 3 T; 0 U; 0 Other;

  Query Match             1.5%;  Score 13;  DB 1;  Length 13;
  Best Local Similarity   100.0%;  Pred. No. 1.5e+02;
  Matches   13;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        706 TGTATAGTTTTAT 718
              |||||||||||||
Db         13 TGTATAGTTTTAT 1


RESULT 240
ABH01040
ID   ABH01040 standard; DNA; 13 BP.
XX
AC   ABH01040;
XX
DT   22-FEB-2002  (first entry)
XX
DE   Oligonucleotide SEQ ID NO 201017 for detecting SNP TSC0049445.
XX
KW   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW   peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW   central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS   Homo sapiens.
XX
PN   WO200177384-A2.
XX
PD   18-OCT-2001.
XX
PF   06-APR-2001; 2001WO-IB000713.
XX
PR   07-APR-2000; 2000DE-01019173.
XX
PA   (EPIG-) EPIGENOMICS AG.
XX
PI   Olek A,  Piepenbrock C,  Berlin K;
XX
DR   WPI; 2001-657177/75.
XX
PT   Set of oligonucleotides, useful for diagnosis and cell typing, is
PT   designed to detect single-nucleotide polymorphisms and cytosine
PT   methylation status.
XX
PS   Claim 1; SEQ ID NO 201017; 29pp + Sequence Listing; German.
XX
CC   This invention describes novel oligonucleotide primers or peptide nucleic
CC   acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC   and cytosine methylation status in chemically pretreated genomic DNA. The
CC   oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC   range of diseases including immune system, gastrointestinal, respiratory,
CC   central nervous system, cardiovascular and metabolic disorders. The
CC   oligomers are also used for detecting cell type differentiation. ABC00010
CC   -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
CC   represent the oligomers described in the invention. NOTE: The sequence
CC   data for this patent did not form part of the printed specification, but
CC   was obtained in electronic format from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences
XX
SQ   Sequence 13 BP; 5 A; 0 C; 3 G; 5 T; 0 U; 0 Other;

  Query Match             1.5%;  Score 13;  DB 1;  Length 13;
  Best Local Similarity   100.0%;  Pred. No. 1.5e+02;
  Matches   13;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        215 TTTGGAGATAATA 227
              |||||||||||||
Db          1 TTTGGAGATAATA 13


RESULT 241
ABH01041/c
ID   ABH01041 standard; DNA; 13 BP.
XX
AC   ABH01041;
XX
DT   22-FEB-2002  (first entry)
XX
DE   Oligonucleotide SEQ ID NO 201018 for detecting SNP TSC0049445.
XX
KW   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW   peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW   central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS   Homo sapiens.
XX
PN   WO200177384-A2.
XX
PD   18-OCT-2001.
XX
PF   06-APR-2001; 2001WO-IB000713.
XX
```

PR 07-APR-2000; 2000DE-01019173.
XX
PA (EPIG-) EPIGENOMICS AG.
XX
PI Olek A, Piepenbrock C, Berlin K;
XX
DR WPI; 2001-657177/75.
XX
PT Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX
PS Claim 1; SEQ ID NO 201018; 29pp + Sequence Listing; German.
XX
CC This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 13 BP; 5 A; 3 C; 0 G; 5 T; 0 U; 0 Other;

Query Match 1.5%; Score 13; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 1.5e+02;
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 215 TTTGGAGATAATA 227
||||||||||||||
Db 13 TTTGGAGATAATA 1

RESULT 242
ABF54652/c
ID ABF54652 standard; DNA; 13 BP.
XX
AC ABF54652;
XX
DT 21-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 154649 for detecting SNP TSC0039096.
XX
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS Homo sapiens.
XX
PN WO200177384-A2.
XX
PD 18-OCT-2001.
XX
PF 06-APR-2001; 2001WO-IB000713.
XX
PR 07-APR-2000; 2000DE-01019173.
XX
PA (EPIG-) EPIGENOMICS AG.
XX
PI Olek A, Piepenbrock C, Berlin K;
XX
DR WPI; 2001-657177/75.
XX
PT Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX
PS Claim 1; SEQ ID NO 154649; 29pp + Sequence Listing; German.
XX
CC This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 13 BP; 5 A; 0 C; 4 G; 4 T; 0 U; 0 Other;

Query Match 1.5%; Score 13; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 1.5e+02;
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 527 TAAACATTCCCTT 539
||||||||||||||
Db 13 TAAACATTCCCTT 1

RESULT 243
ABF56542
ID ABF56542 standard; DNA; 13 BP.
XX
AC ABF56542;
XX
DT 21-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 156539 for detecting SNP TSC0039466.
XX
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS Homo sapiens.
XX
PN WO200177384-A2.
XX
PD 18-OCT-2001.
XX
PF 06-APR-2001; 2001WO-IB000713.
XX
PR 07-APR-2000; 2000DE-01019173.
XX
PA (EPIG-) EPIGENOMICS AG.
XX
PI Olek A, Piepenbrock C, Berlin K;
XX
DR WPI; 2001-657177/75.
XX
PT Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single-nucleotide polymorphisms and cytosine
PT methylation status.
XX
PS Claim 1; SEQ ID NO 156539; 29pp + Sequence Listing; German.
XX
CC This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation. ABC00010
CC -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
CC represent the oligomers described in the invention. NOTE: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences

```
XX
SQ   Sequence 13 BP; 3 A; 0 C; 2 G; 8 T; 0 U; 0 Other;

  Query Match             1.5%;  Score 13;  DB 1;  Length 13;
  Best Local Similarity   100.0%;  Pred. No. 1.5e+02;
  Matches   13;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        706 TGTATAGTTTTAT 718
              |||||||||||||
Db          1 TGTATAGTTTTAT 13


RESULT 244
AAX54605
ID   AAX54605 standard; DNA; 15 BP.
XX
AC   AAX54605;
XX
DT   05-JUL-1999  (first entry)
XX
DE   Eosinophil peroxidase antisense oligonucleotide fragment.
XX
KW   Antisense oligonucleotide; multiple target; antisense treatment;
KW   impaired respiration; inflammation; lung disease;
KW   pulmonary vasoconstriction; inflammation; allergic rhinitis;
KW   acute asthma; allergy; asthma; impeded respiration;
KW   respiratory distress syndrome; pain; cystic fibrosis;
KW   pulmonary hypertension; pulmonary vasoconstriction; emphysema;
KW   chronic obstructive pulmonary disease; leukemia; lymphoma; carcinoma;
KW   colon cancer; breast cancer; lung cancer; pancreatic cancer;
KW   hepatocellular carcinoma; kidney cancer; melanoma; hepatic metastasis;
KW   prostate cancer; ss.
XX
OS   Synthetic.
XX
PN   WO9913886-A1.
XX
PD   25-MAR-1999.
XX
PF   17-SEP-1998;   98WO-US019419.
XX
PR   17-SEP-1997;   97US-0059160P.
PR   09-JUN-1998;   98US-00093972.
XX
PA   (UYEC-) UNIV EAST CAROLINA.
XX
PI   Nyce JW;
XX
DR   WPI; 1999-229400/19.
XX
PT   New antisense oligonucleotides used in treatment of, e.g. pulmonary
PT   vasoconstriction.
XX
PS   Disclosure; Page 46; 120pp; English.
XX
CC   The specification describes antisense oligonucleotides (AAX52869-X55271)
CC   directed against at least 2 mRNAs selected from target genes, coding and
CC   non-coding regions of RNAs corresponding to target genes, gene initiation
CC   codons, genomic flanking regions, intron-exon borders, the 5'-end, the 3'
CC   -end and the juxta-section between coding and non-coding regions and all
CC   segments of RNAs encoding proteins associated with one or more diseases,
CC   conditions or mixtures. The antisense oligonucleotides may be derived
CC   from sequences AAX55272-74. These multiple target oligonucleotides
CC   (specifically AAX55180-271) can be used for the antisense treatment of
CC   diseases and conditions. Typical diseases and conditions are those
CC   associated with impaired respiration and inflammation, including lung
CC   diseases, pulmonary vasoconstriction, inflammation, allergic rhinitis,
CC   acute asthma, allergies, asthma, impeded respiration, respiratory
CC   distress syndrome, pain, cystic fibrosis, pulmonary hypertension,
CC   pulmonary vasoconstriction, emphysema, chronic obstructive pulmonary
CC   disease (COPD), and cancers such as leukemias, lymphomas, carcinomas e.g.
CC   colon cancer, breast cancer, lung cancer, pancreatic cancer,
CC   hepatocellular carcinoma, kidney cancer, melanoma, hepatic metastases, as
CC   well as all types of cancers which may metastasize or have metastasized
CC   to the lungs, including breast and prostate cancer
XX
SQ   Sequence 15 BP; 0 A; 2 C; 7 G; 6 T; 0 U; 0 Other;

  Query Match             1.5%;  Score 13;  DB 1;  Length 15;
  Best Local Similarity   100.0%;  Pred. No. 1.7e+02;
  Matches   13;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy         12 GGGGTTTCCGTTG 24
              |||||||||||||
Db          3 GGGGTTTCCGTTG 15


RESULT 245
AAA34052
ID   AAA34052 standard; DNA; 15 BP.
XX
AC   AAA34052;
XX
DT   28-JUL-2000  (first entry)
XX
DE   Human adenosine receptor related polynucleotide SEQ ID NO:1741.
XX
KW   Human; adenosine receptor; low adenosine antisense oligonucleotide;
KW   phosphorothioate; impaired respiration; inflammation; allergy;
KW   allergic disease; bronchoconstriction; inhibitor; antiinflammatory;
KW   antiallergic; antiasthmatic; cytostatic; analgesic; impaired airway;
KW   lung disease; ischaemic condition; pulmonary vasoconstriction; asthma;
KW   respiratory distress syndrome; pain; cystic fibrosis; emphysema;
KW   pulmonary hypertension; chronic obstructive pulmonary disease; COPD;
KW   cancer; leukaemia; lymphoma; carcinoma; metastasis; ss.
XX
OS   Homo sapiens.
XX
PN   WO200009525-A2.
XX
PD   24-FEB-2000.
XX
PF   03-AUG-1999;   99WO-US017712.
XX
PR   03-AUG-1998;   98US-0095212P.
XX
PA   (UYEC-) UNIV EAST CAROLINA.
XX
PI   Nyce JW;
XX
DR   WPI; 2000-205971/18.
XX
PT   New antisense oligonucleotides useful for treating e.g. pulmonary
PT   vasoconstruction, inflammation, allergies, asthma, hypertension,
PT   bronchitis, emphysema, respiratory distress syndrome, ischemia or
PT   cancers.
XX
PS   Disclosure; Page 481; 1343pp; English.
XX
CC   The present invention describes a new composition comprising an antisense
CC   oligonucleotide (ON) with low adenosine (up to 15%), which targets
CC   nucleic acids involved in bronchoconstriction, allergies, and/or
CC   inflammation. The ON can have antiinflammatory, antiallergic,
CC   antiasthmatic, cytostatic and analgesic activities. The compositions are
CC   useful for the treatment of diseases associated with inflammation,
CC   impaired airways, including lung disease and diseases whose secondary
CC   effects afflict the lungs of a subject. They can be used for treating
CC   e.g. ischaemic conditions, pulmonary vasoconstriction, allergies, asthma,
CC   impeded respiration, respiratory distress syndrome, pain, cystic
CC   fibrosis, pulmonary hypertension, emphysema, chronic obstructive
CC   pulmonary disease (COPD), and cancers such as leukaemias, lymphomas,
CC   carcinomas, and cancers which may metastasise to the lungs, including
CC   breast and prostate cancer. The reduction of the adenosine content of the
CC   ONs reduces side effects. The A-containing ONs break down with the
CC   release of deoxyadenosine which activates adenosine receptors causing
CC   bronchoconstriction and inflammation. AAA32313 to AAA35312 represent the
```

CC nucleotide sequences given in the sequence listing from the present
CC invention, which correspond to SEQ ID NO:1 to 2815, and then the last 185
CC sequences are also called SEQ ID NO:1 to 185, but the sequences differ
CC from the previously named sequences. SEQ ID NO:11 to 1680 (AAA32323 to
CC AAA33992) are specifically claimed ONs from the present invention. N.B.
CC Sequences given in the disclosure of the present invention do not match
CC up with their corresponding SEQ ID NO: sequences given in the sequence
CC listing
XX
SQ Sequence 15 BP; 0 A; 2 C; 7 G; 6 T; 0 U; 0 Other;

Query Match 1.5%; Score 13; DB 1; Length 15;
Best Local Similarity 100.0%; Pred. No. 1.7e+02;
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 12 GGGGTTTCCGTTG 24
||||||||||||
Db 3 GGGGTTTCCGTTG 15

RESULT 246
AAF20174
ID AAF20174 standard; DNA; 15 BP.
XX
AC AAF20174;
XX
DT 14-MAR-2001 (first entry)
XX
DE Human eosinophil peroxidase polynucleotide fragment #1741.
XX
KW Low adenosine antisense oligonucleotide; phosphorothioate; allergy;
KW human; airway disorder; bronchoconstriction; lung inflammation;
KW surfactant depletion; respiratory; bronchodilator; antiinflammatory;
KW immunosuppressive; antiasthmatic; analgesic; hypotensive; cytostatic;
KW respiratory obstruction; pulmonary obstruction; impeded respiration;
KW surfactant hypoproduction; pulmonary vasoconstriction; asthma; RDS;
KW respiratory distress syndrome; pain; cystic fibrosis; allergic rhinitis;
KW pulmonary hypertension; emphysema; pulmonary transplantation rejection;
KW chronic obstructive pulmonary disease; pulmonary infection; bronchitis;
KW cancer; ss.
XX
OS Homo sapiens.
XX
PN WO200062736-A2.
XX
PD 26-OCT-2000.
XX
PF 24-MAR-2000; 2000WO-US008020.
XX
PR 06-APR-1999; 99US-0127958P.
XX
PA (UYEC-) UNIV EAST CAROLINA.
PA (NYCE/) NYCE J W.
XX
PI Nyce JW;
XX
DR WPI; 2000-679539/66.
XX
PT Low adenosine (A) content antisense oligonucleotides which do not trigger
PT adenosine receptors during metabolism, useful e.g. for treating cancers
PT and respiratory obstructions.
XX
PS Claim 14; Page 145; 1592pp; English.
XX
CC The present invention describes low adenosine (A) content antisense
CC oligonucleotides and compositions (I) comprising them. In the antisense
CC oligonucleotides the A is replaced by a 'Universal' or alternative base.
CC (I) can have respiratory, bronchodilator, antiinflammatory, analgesic,
CC immunosuppressive, antiasthmatic, hypotensive and cytostatic activities.
CC The antisense oligonucleotides and (I) can be used to down-regulate the
CC expression and or activity of target polypeptides associated with
CC lung/respiratory disorders and malignancies, such as stimulating and
CC activating peptide factors and transmitters, transcription factors,
CC immunoglobulins and antibodies, antibody receptors, cytokines and
CC chemokines, endogenously produced specific and non-specific enzymes,
CC binding proteins, adhesion molecules and their receptors, cytokine and
CC chemokine receptors, adenosine receptors, bradykinin receptors, central
CC nervous system (CNS) and peripheral nervous and non-nervous system
CC receptors, CNS and peripheral nervous and non-nervous system peptide
CC transmitters, defensins, growth factors, vasoactive peptides and
CC receptors, binding proteins and malignancy associated proteins. The
CC antisense oligonucleotides may be used in this way to treat disorders
CC including respiratory obstruction (especially pulmonary obstruction
CC and/or bronchoconstriction) and/or lung inflammation, allergy(ies) and/or
CC surfactant hypoproduction which are associated with a disease or
CC condition selected from pulmonary vasoconstriction, inflammation,
CC allergies, asthma, impeded respiration, respiratory distress syndrome
CC (RDS), pain, cystic fibrosis (CF), allergic rhinitis (AR), pulmonary
CC hypertension, emphysema, chronic obstructive pulmonary disease (COPD),
CC pulmonary transplantation rejection, pulmonary infections, bronchitis,
CC and/or cancer. AAF18434 to AAF21543 represent human polynucleotide
CC fragments and antisense oligonucleotides used in the exemplification of
CC the present invention
XX
SQ Sequence 15 BP; 0 A; 2 C; 7 G; 6 T; 0 U; 0 Other;

Query Match 1.5%; Score 13; DB 1; Length 15;
Best Local Similarity 100.0%; Pred. No. 1.7e+02;
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 12 GGGGTTTCCGTTG 24
||||||||||||
Db 3 GGGGTTTCCGTTG 15

RESULT 247
AAF70268
ID AAF70268 standard; DNA; 15 BP.
XX
AC AAF70268;
XX
DT 20-APR-2001 (first entry)
XX
DE Human DRD2 allele specific oligonucleotide probe SEQ ID NO:11.
XX
KW Human; dopamine receptor D2; DRD2; polymorphism; allele specific;
KW drug target isogene; detection; single nucleotide polymorphism; SNP;
KW genotype; schizophrenia; Parkinson's disease; myoclonus dystonia; MD;
KW probe; PCR primer; ss.
XX
OS Homo sapiens.
XX
PN WO200105832-A1.
XX
PD 25-JAN-2001.
XX
PF 19-JUL-2000; 2000WO-US019644.
XX
PR 19-JUL-1999; 99US-0144493P.
XX
PA (GENA-) GENAISSANCE PHARM INC.
XX
PI Chew A, Denton RR, Duda A, Nandabalan K, Stephens JC;
XX
DR WPI; 2001-091967/10.
XX
PT Polynucleotides comprising single nucleotide polymorphisms in the human
PT dopamine receptor D2, useful for detecting mutations associated with,
PT e.g. schizophrenia, Parkinson's and myoclonus dystonia.
XX
PS Claim 15; Page 21; 135pp; English.
XX
CC The present invention describes polynucleotides comprising single
CC nucleotide polymorphisms (SNPs) in the human dopamine receptor D2 (DRD2).
CC The polynucleotides may be used in assays to detect and characterise
CC polymorphisms in DRD2 that affect its expression and activity and are

CC involved in disorders such as schizophrenia, Parkinson's and myoclonus
CC dystonia (MD). This information would be useful for studying the
CC biological function of DRD2 as well as in identifying drugs targeting
CC this protein for the treatment of disorders related to its abnormal
CC expression or function. Polymorphisms in the DRD2 gene affect the
CC expression of active and functional polypeptides. Therefore it is
CC advantageous to detect polymorphisms in the DRD2 gene and how those
CC polymorphisms are combined in different copies of the gene. AAF70261 to
CC AAF70308 represent human DRD2 allele specific oligonucleotide probes, and
CC AAF70309 to AAF70404 represent human DRD2 allele specific oligonucleotide
CC primers which are used in the detection of DRD2 polymorphisms. AAF70405
CC to AAF70452 represent oligonucleotide primers for the detection of human
CC DRD2 polymorphisms which are given in the exemplification of the present
CC invention. AAF70453 to AAF70538 represent PCR primers for the human DRD2
CC gene which are used in examples from the present invention
XX
SQ Sequence 15 BP; 4 A; 3 C; 2 G; 6 T; 0 U; 0 Other;

Query Match 1.5%; Score 13; DB 1; Length 15;
Best Local Similarity 100.0%; Pred. No. 1.7e+02;
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 737 CTGTTTCAATGAC 749
||||||||||||||
Db 1 CTGTTTCAATGAC 13

RESULT 248
ABZ95868
ID ABZ95868 standard; DNA; 15 BP.
XX
AC ABZ95868;
XX
DT 17-OCT-2003 (first entry)
XX
DE Human eosinophil peroxidase antisense fragment no.1728.
XX
KW Human; antisense; lung dysfunction; nasal airway dysfunction;
KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;
KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
KW antisense gene therapy; respiratory; lung; adenosine sensitivity;
KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
KW lung inflammation; respiratory disease; ds.
XX
OS Homo sapiens.
XX
PN WO200285308-A2.
XX
PD 31-OCT-2002.
XX
PF 23-APR-2002; 2002WO-US013135.
XX
PR 24-APR-2001; 2001US-0286137P.
XX
PA (EPIG-) EPIGENESIS PHARM INC.
XX
PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
PI Miller S, Tang L, Shahabuddin S;
XX
DR WPI; 2003-229219/22.
XX
PT Pharmaceutical composition for treating ailments associated with impaired
PT respiration, has oligo(s) antisense to specific gene(s) or its
PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
PT ubiquinone.
XX
PS Disclosure; SEQ ID NO 11110; 872pp; English.
XX
CC The invention relates to a novel pharmaceutical composition, which has a
CC first active agent comprising an oligonucleotide antisense to the
CC initiation codon, coding region, 5' or 3' end genomic flanking regions,
CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
CC junctions of genes encoding a polypeptide associated with lung and/or
CC nasal airway dysfunction and a second active agent comprising an
CC antiinflammatory steroid and ubiquinone. A composition of the invention
CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,
CC immunosuppressive, and cytostatic activity. The composition may have a
CC use in antisense gene therapy. The composition is useful for treating or
CC preventing a respiratory, lung or malignant disease or condition, also
CC for enhancing the prophylactic or therapeutic respiratory effect of an
CC antiinflammatory steroid in a subject, for reducing or depleting levels
CC of, or reducing sensitivity to adenosine, reducing levels of adenosine
CC receptor, producing bronchodilation, increasing levels of ubiquinone or
CC lung surfactant in a subject's tissue, or treating bronchoconstriction,
CC lung inflammation, lung allergies, or a respiratory disease or condition.
CC Note: The sequence data for this patent is not represented in the printed
CC specification, but was obtained in electronic format directly from WIPO
CC at ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 15 BP; 0 A; 2 C; 7 G; 6 T; 0 U; 0 Other;

Query Match 1.5%; Score 13; DB 1; Length 15;
Best Local Similarity 100.0%; Pred. No. 1.7e+02;
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 12 GGGGTTTCCGTTG 24
||||||||||||||
Db 3 GGGGTTTCCGTTG 15

RESULT 249
ABD19123
ID ABD19123 standard; DNA; 15 BP.
XX
AC ABD19123;
XX
DT 29-JUL-2004 (first entry)
XX
DE Human eosinophil peroxidase DNA fragment 1728.
XX
KW Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;
KW respiratory tract inflammation; adenosine sensitivity; lung; cancer;
KW surfactant depletion; antiallergic; antiinflammatory; antiasthmatic;
KW analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis;
KW beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;
KW respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;
KW emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;
KW pulmonary transplantation rejection; ds.
XX
OS Homo sapiens.
XX
PN WO200285309-A2.
XX
PD 31-OCT-2002.
XX
PF 23-APR-2002; 2002WO-US013143.
XX
PR 24-APR-2001; 2001US-0286036P.
XX
PA (EPIG-) EPIGENESIS PHARM INC.
XX
PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
PI Miller S, Tang L, Shahabuddin S;
XX
DR WPI; 2003-093058/08.
XX
PT Pharmaceutical composition for treating asthma, has antisense
PT oligonucleotide containing less percentage of adenosine, targeted to
PT nucleic acids associated with lung airway or lung dysfunction, and
PT bronchodilating agent.
XX
PS Claim 15; SEQ ID NO 11110; 763pp; English.
XX
CC This invention describes a novel composition (a) a first active agent,
CC comprising oligonucleotides, effective for alleviating
CC bronchoconstriction, respiratory tract inflammation, allergies and

CC reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors, CC surfactant depletion or hyposecretion, when administered to a mammal. The CC oligonucleotides are derived from a gene encoding or regulating CC expression of a target polypeptide associated with lung airway or lung CC dysfunction or cancer and can be anti-sense to the corresponding mRNA. CC The invention also describes a kit, that comprises: (a) a delivery CC device, in separate containers, (b) the oligonucleotides, (c) CC instructions for adding a carrier and for use of the kit. The composition CC of the invention has antiallergic, antiinflammatory, antiasthmatic, CC analgesic, hypotensive, immunosuppressive and cytostatic activity, is a CC beta-adrenergic agonist. The composition is useful for preventing or CC treating a respiratory, lung or malignant disease. The administered CC composition comprises oligo and is administered to reduce the production CC or availability, or to increase the degradation of the target mRNA or to CC reduce the amount of target polypeptide present in the lungs. The CC pulmonary obstruction, and/or bronchoconstriction and/or lung CC inflammation, allergies and/or surfactant hypoproduction are associated CC with a disease or condition such as pulmonary vasoconstriction, CC inflammation, allergies, asthma, impeded respiration, respiratory CC distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary CC hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary CC transplantation rejection, pulmonary infections, bronchitis or cancer. CC The reduced adenosine content of the anti-sense oligos corresponding to CC thymidines present in the target RNA serves to prevent the breakdown of CC the oligonucleotides into products that free adenosine into the system CC e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to CC prevent any unwanted effects due to it
XX
SQ Sequence 15 BP; 0 A; 2 C; 7 G; 6 T; 0 U; 0 Other;

Query Match 1.5%; Score 13; DB 1; Length 15;
Best Local Similarity 100.0%; Pred. No. 1.7e+02;
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 12 GGGGTTTCCGTTG 24
||||||||||||||
Db 3 GGGGTTTCCGTTG 15

RESULT 250
ADH17043/c
ID ADH17043 standard; DNA; 15 BP.
XX
AC ADH17043;
XX
DT 11-MAR-2004 (first entry)
XX
DE Taqman probe used to analyse human EphB4 sequence.
XX
KW tyrosine kinase activity; type 1 plasminogen activator inhibitor; PAI-1;
KW TIMP-1; tissue inhibitor of metalloproteinase 1; vinculin;
KW vascular endothelial growth factor; VEGF; placental growth factor; PLGF;
KW migration inhibitory factor; MIG; probe; ss; human; EphB4.
XX
OS Homo sapiens.
XX
PN WO2003097854-A2.
XX
PD 27-NOV-2003.
XX
PF 19-MAY-2003; 2003WO-US015711.
XX
PR 17-MAY-2002; 2002US-0380872P.
PR 24-FEB-2003; 2003US-0448874P.
PR 24-FEB-2003; 2003US-0448922P.
XX
PA (SUGE-) SUGEN INC.
XX
PI Morimoto A, Deprimo S, O'farrell A, Smolich BD, Manning WC;
PI Walter SA, Schilling JW, Cherrington J;
XX
DR WPI; 2004-042604/04.
XX
PT Determining whether a test compound inhibits tyrosine kinase activity in
PT a mammal by exposing the mammal to the test compound and measuring in the
PT mammal the level of at least one of the measured proteins or mRNA
PT transcripts.
XX
PS Example K; SEQ ID NO 42; 408pp; English.
XX
CC The invention relates to a novel method for determining whether a test
CC compound inhibits tyrosine kinase activity in a mammal comprising
CC measuring in the mammal the level of at least one of the proteins and/or
CC mRNA transcripts or genes for such proteins comprising type 1 plasminogen
CC activator inhibitor (PAI-1), TIMP-1 (tissue inhibitor of
CC metalloproteinase 1), vinculin, vascular endothelial growth factor
CC (VEGF), placental growth factor (PLGF), VEGF/PLGF heterodimers or
CC migration inhibitory factor (MIG), exposing the mammal to the test
CC compound and then measuring in the mammal the level of at least one of
CC the proteins and/or mRNA transcripts previously measured. The method of
CC the invention may be useful for determining whether a test compound
CC inhibits tyrosine kinase activity in a mammal. The current sequence is
CC that of the Taqman probe which was used in the exemplification of the
CC invention.
XX
SQ Sequence 15 BP; 2 A; 5 C; 3 G; 5 T; 0 U; 0 Other;

Query Match 1.5%; Score 13; DB 1; Length 15;
Best Local Similarity 100.0%; Pred. No. 1.7e+02;
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 441 ACTTGGGCAAAGG 453
||||||||||||||
Db 13 ACTTGGGCAAAGG 1

RESULT 251
ADM56222/c
ID ADM56222 standard; DNA; 16 BP.
XX
AC ADM56222;
XX
DT 03-JUN-2004 (first entry)
XX
DE Aspergillus oryzae TAKA amylase PCR primer AMY5.
XX
KW Host cell; biopesticide; amylase; enzyme; PCR; primer; ss.
XX
OS Aspergillus oryzae.
XX
PN WO2004020611-A1.
XX
PD 11-MAR-2004.
XX
PF 29-AUG-2003; 2003WO-BE000143.
XX
PR 30-AUG-2002; 2002US-0407843P.
XX
PA (PURA-) PURATOS NV.
XX
PI Jonniaux J, Valepyn E, Corbisier A, Dauvrin T;
XX
DR WPI; 2004-239191/22.
XX
PT New Myrothecium host cell comprising at least one recombinant DNA
PT construct, useful as cell factory for industrial enzyme and/or protein
PT production for producing therapeutic drugs, and as source of
PT biopesticide.
XX
PS Example 3; SEQ ID NO 31; 83pp; English.
XX
CC The present sequence is that of PCR primer AMY5. In an example from the
CC invention, this primer and primer GPD2 ADM56221 for the glyceraldehyde-3-
CC phosphate dehydrogenase (GPD) promoter were used to detect the presence
CC of amylase expression vector p2G-S in Myrothecium sp. transformants,
CC verifying integration of the vector in the Myrothecium genome without

```
CC   amplification of the endogenous amylase gene or GPD promoter. The vector
CC   was used to transform Myrothecium gramineum (syn. Xepiculopsis graminea)
CC   strain MUCL39210 and Aspergillus niger MUCL28817 protoplasts. On average,
CC   the Myrothecium transformants produced 2.75 times more alpha-amylase than
CC   the Aspergillus transformants. The invention relates to the use of
CC   Myrothecium spp. as host cells. Myrothecium sp. host cells were found to
CC   be easy to transform, easy to culture, to have a high growth rate coupled
CC   to high biomass production, and to be suitable for large-scale or
CC   industrial production of proteins of interest, such as enzymes (e.g.
CC   amylase or xylanase) or therapeutic drugs. Applications include protein
CC   and/or enzyme production for food and/or therapeutic applications, and
CC   the use of transformed Myrothecium as a biopesticide (claimed).
XX
SQ   Sequence 16 BP; 3 A; 6 C; 4 G; 3 T; 0 U; 0 Other;

  Query Match             1.5%;  Score 13;  DB 1;  Length 16;
  Best Local Similarity   100.0%;  Pred. No. 1.8e+02;
  Matches   13;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        109 GCAGGGCATCATC 121
              |||||||||||||
Db         14 GCAGGGCATCATC 2


RESULT 252
AAC68370
ID   AAC68370 standard; DNA; 16 BP.
XX
AC   AAC68370;
XX
DT   20-FEB-2001  (first entry)
XX
DE   Human IRRR oligonucleotide #26.
XX
KW   Insulin receptor-related receptor; IRRR; chromosome 1q21-q24; obesity;
KW   dyslipidemia; diabetes; ss.
XX
OS   Homo sapiens.
XX
PN   WO200065090-A2.
XX
PD   02-NOV-2000.
XX
PF   19-APR-2000; 2000WO-US010644.
XX
PR   22-APR-1999;   99US-00296906.
PR   22-JUN-1999;   99US-00337976.
XX
PA   (ZYMO ) ZYMOGENETICS INC.
XX
PI   Lok S,  Whitmore TE;
XX
DR   WPI; 2000-687365/67.
XX
PT   Detecting a chromosome 1q21-q24 abnormality for diagnosing metabolic
PT   disease, such as human obesity and diabetic disorders, comprises
PT   examining insulin receptor-related receptor gene and its gene products.
XX
PS   Claim 10; Page 43; 111pp; English.
XX
CC   The present invention relates to insulin receptor-related receptor
CC   (IRRR). Mutations in this gene indicate a chromosome 1q21-q24
CC   abnormality. IRRR polypeptides and DNA may be useful in the diagnosis of
CC   of disorders associated with abnormal expression of the IRRR protein, for
CC   example obesity, dyslipidemia and diabetes
XX
SQ   Sequence 16 BP; 3 A; 5 C; 4 G; 4 T; 0 U; 0 Other;

  Query Match             1.5%;  Score 12.8;  DB 1;  Length 16;
  Best Local Similarity   87.5%;  Pred. No. 1.9e+02;
  Matches   14;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        380 TCACTCTCAGGAGACC 395
                |||||||||||| ||
Db          1 TTACTCTCAGGAGGCC 16


RESULT 253
ADI53301
ID   ADI53301 standard; DNA; 16 BP.
XX
AC   ADI53301;
XX
DT   22-APR-2004  (first entry)
XX
DE   Target molecule detection method-related oligonucleotide #5.
XX
KW   target molecule detection; electronic status; semiconductor;
KW   charge pair separation; semiconductor surface-modifying molecule;
KW   oligonucleotide; ss.
XX
OS   Unidentified.
XX
FH   Key             Location/Qualifiers
FT   modified_base   1
FT                   /*tag=  a
FT                   /mod_base= OTHER
FT                   /note= "OTHER = carboxy dT"
XX
PN   US6677606-B1.
XX
PD   13-JAN-2004.
XX
PF   28-JUN-2000; 2000US-00606429.
XX
PR   28-JUN-2000; 2000US-00606429.
XX
PA   (UYCH-) UNIV CHICAGO.
XX
PI   Rajh T,  Paunesku T,  Woloschak GE,  Thurnauer MC;
XX
DR   WPI; 2004-200357/19.
XX
PT   Detection of target molecules, involves establishing electronic
PT   communication between target molecules and semiconductor, and re-
PT   determining electronic status of semiconductor by amplifying electronic
PT   signal.
XX
PS   Disclosure; Col 7; 13pp; English.
XX
CC   The invention comprises a method for detecting target molecules. The
CC   method involves; determining the electronic status of a semiconductor,
CC   establishing electronic communication between the target molecules and
CC   the semiconductor, subjecting the semiconductor to energy influx
CC   sufficient to produce a charge pair separation on the semiconductor's
CC   surface (thereby generating an electronic signal), prolonging the charge
CC   separation via a semiconductor surface-modifying molecule, and
CC   redetermining the electronic status of the semiconductor by amplifying
CC   the electronic signal. The method of the invention is useful for
CC   detecting target molecules, biological molecules, and target groups. The
CC   present DNA sequence represents an oligonucleotide which was used in an
CC   example of the invention.
XX
SQ   Sequence 16 BP; 1 A; 2 C; 5 G; 8 T; 0 U; 0 Other;

  Query Match             1.5%;  Score 12.8;  DB 1;  Length 16;
  Best Local Similarity   87.5%;  Pred. No. 1.9e+02;
  Matches   14;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        533 TTCCCTTGGATGTAGT 548
              || ||||||||||| ||
Db          1 TTTCCTTGGATGTGGT 16


RESULT 254
ADO43601
```

```
ID   ADO43601 standard; DNA; 16 BP.
XX
AC   ADO43601;
XX
DT   29-JUL-2004  (first entry)
XX
DE   Mutant DNA fragment of SOD-1 where G12R mutation occurs.
XX
KW   DNAzyme; dominantly inherited disorder; achondroplasia;
KW   amyotrophic lateral sclerosis; Marfan syndrome; hypercholesterolemia;
KW   osteogenesis imperfecta; SCCMS; ss; superoxide disutase; SOD-1.
XX
OS   Homo sapiens.
XX
PN   WO2004038019-A2.
XX
PD   06-MAY-2004.
XX
PF   23-OCT-2003; 2003WO-GB004614.
XX
PR   23-OCT-2002; 2002GB-00024663.
XX
PA   (ISIS-) ISIS INNOVATION LTD.
XX
PI   Beeson D,  Wood M,  Abdelgany A;
XX
DR   WPI; 2004-365523/34.
XX
PT   New DNAzyme that cleaves mutant polynucleotides, useful in treating a
PT   dominantly inherited disorder associated with a mutant allele, such as
PT   achondroplasia, amyotrophic lateral sclerosis, Marfan syndrome and
PT   hypercholesterolemia.
XX
PS   Disclosure; Page 7; 24pp; English.
XX
CC   The specification describes a DNAzyme which selectively cleaves a mutant
CC   polynucleotide by cleaving at a site remote from the mutation site. The
CC   DNAzyme binds selectively to a mutant allele or its expressed product,
CC   and comprises a central catalytic motif (Helix II) and two flanking
CC   regions (helix I and III) where at least one of the flanking regions has
CC   a polynucleotide sequence complementary to a region that includes the
CC   mutation in the mutant allele or to that of the expressed product. Both
CC   flanking regions are complementary to mutated regions of the mutant
CC   allele or the expressed product. The complement of the mutation is 2 or 3
CC   nucleotides upstream or downstream of the site of cleavage, preferably in
CC   helix I. Helix I and III are of different lengths, where helix I is
CC   shorter than helix III, and their length is 21-7 or 15-8 nucleotides.
CC   Helix I preferably comprises 9 nucleotides and helix III 13 nucleotides.
CC   At least one of the flanking regions comprises ribonucleic acid. The
CC   DNAzyme further comprises a stem-loop structure at either or both
CC   terminus. The DNAzyme is useful in therapy, in particular for the
CC   manufacture of a medicament for the treatment of a disorder associated
CC   with a mutant allele in a patient, where the DNAzyme comprises a central
CC   catalytic motif and two flanking substrate-binding regions, and where at
CC   least one flanking region binds at the site of mutation in the mutant
CC   allele or its expressed product and the catalytic motif cleaves at a site
CC   remote from the site of mutation. The disorder is a dominantly inherited
CC   disorder, such as achondroplasia, amyotrophic lateral sclerosis with SOD1
CC   mutation, Marfan syndrome, hypercholesterolemia, osteogenesis imperfecta
CC   and SCCMS. ADO43600-ADO43601 represent the wild type and mutant DNA
CC   fragments, respectively, of the Cu/Zn superoxide disutase (SOD-1) gene
CC   where a G12R mutation occurs and causes amyotrophic lateral sclerosis.
CC   These sequences are suitable for the design of DNAzymes of the invention
CC   (see ADO43602).
XX
SQ   Sequence 16 BP; 2 A; 7 C; 6 G; 1 T; 0 U; 0 Other;

  Query Match             1.5%;  Score 12.8;  DB 1;  Length 16;
  Best Local Similarity   87.5%;  Pred. No. 1.9e+02;
  Matches   14;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy         94 GGGCGACGGCCCAGTG 109
              || |||| ||||||||
Db          1 GGCCGACCGCCCAGTG 16


RESULT 255
ABH27646/c
ID   ABH27646 standard; DNA; 13 BP.
XX
AC   ABH27646;
XX
DT   22-FEB-2002  (first entry)
XX
DE   Oligonucleotide SEQ ID NO 227623 for detecting SNP TSC0055504.
XX
KW   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW   peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW   central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS   Homo sapiens.
XX
PN   WO200177384-A2.
XX
PD   18-OCT-2001.
XX
PF   06-APR-2001; 2001WO-IB000713.
XX
PR   07-APR-2000; 2000DE-01019173.
XX
PA   (EPIG-) EPIGENOMICS AG.
XX
PI   Olek A,  Piepenbrock C,  Berlin K;
XX
DR   WPI; 2001-657177/75.
XX
PT   Set of oligonucleotides, useful for diagnosis and cell typing, is
PT   designed to detect single-nucleotide polymorphisms and cytosine
PT   methylation status.
XX
PS   Claim 1; SEQ ID NO 227623; 29pp + Sequence Listing; German.
XX
CC   This invention describes novel oligonucleotide primers or peptide nucleic
CC   acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC   and cytosine methylation status in chemically pretreated genomic DNA. The
CC   oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC   range of diseases including immune system, gastrointestinal, respiratory,
CC   central nervous system, cardiovascular and metabolic disorders. The
CC   oligomers are also used for detecting cell type differentiation. ABC00010
CC   -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
CC   represent the oligomers described in the invention. NOTE: The sequence
CC   data for this patent did not form part of the printed specification, but
CC   was obtained in electronic format from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences
XX
SQ   Sequence 13 BP; 3 A; 0 C; 1 G; 8 T; 0 U; 1 Other;

  Query Match             1.4%;  Score 12.6;  DB 1;  Length 13;
  Best Local Similarity   92.3%;  Pred. No. 1.6e+02;
  Matches   12;  Conservative    1;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        600 GATAAACATTAAA 612
              :|||||||||||
Db         13 RATAAACATTAAA 1


RESULT 256
ABH27647
ID   ABH27647 standard; DNA; 13 BP.
XX
AC   ABH27647;
XX
DT   22-FEB-2002  (first entry)
XX
DE   Oligonucleotide SEQ ID NO 227624 for detecting SNP TSC0055504.
XX
```

```
KW   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW   peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW   central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS   Homo sapiens.
XX
PN   WO200177384-A2.
XX
PD   18-OCT-2001.
XX
PF   06-APR-2001; 2001WO-IB000713.
XX
PR   07-APR-2000; 2000DE-01019173.
XX
PA   (EPIG-) EPIGENOMICS AG.
XX
PI   Olek A,  Piepenbrock C,  Berlin K;
XX
DR   WPI; 2001-657177/75.
XX
PT   Set of oligonucleotides, useful for diagnosis and cell typing, is
PT   designed to detect single-nucleotide polymorphisms and cytosine
PT   methylation status.
XX
PS   Claim 1; SEQ ID NO 227624; 29pp + Sequence Listing; German.
XX
CC   This invention describes novel oligonucleotide primers or peptide nucleic
CC   acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC   and cytosine methylation status in chemically pretreated genomic DNA. The
CC   oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC   range of diseases including immune system, gastrointestinal, respiratory,
CC   central nervous system, cardiovascular and metabolic disorders. The
CC   oligomers are also used for detecting cell type differentiation. ABC00010
CC   -ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073
CC   represent the oligomers described in the invention. NOTE: The sequence
CC   data for this patent did not form part of the printed specification, but
CC   was obtained in electronic format from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences
XX
SQ   Sequence 13 BP; 8 A; 1 C; 0 G; 3 T; 0 U; 1 Other;

  Query Match             1.4%;  Score 12.6;  DB 1;  Length 13;
  Best Local Similarity   92.3%;  Pred. No. 1.6e+02;
  Matches   12;  Conservative    1;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        600 GATAAACATTAAA 612
              :|||||||||||
Db          1 RATAAACATTAAA 13


RESULT 257
ABK28501
ID   ABK28501 standard; DNA; 15 BP.
XX
AC   ABK28501;
XX
DT   09-APR-2002  (first entry)
XX
DE   Paraoxonase 2 (PON2), allele specific oligonucleotide primer #8.
XX
KW   Paraoxonase 2; PON2; coronary heart disease; ASO;
KW   allele specific oligonucleotide; primer; ss.
XX
OS   Homo sapiens.
XX
PN   WO200188202-A1.
XX
PD   22-NOV-2001.
XX
PF   18-MAY-2001; 2001WO-US016352.
XX
PR   18-MAY-2000; 2000US-0205145P.
XX
PA   (GENA-) GENAISSANCE PHARM INC.
XX
PI   Anastasio AE,  Chew A,  Choi JY,  Denton RR,  Lee HH,  Nandabalan K;
XX
DR   WPI; 2002-121985/16.
XX
PT   An isolated polynucleotide comprising a paraxonase 2 (PON2) isogene
PT   encodes a pharmaceutically important protein for the identification of
PT   polymorphisms at the PON2 locus.
XX
PS   Claim 17; Page 13; 125pp; English.
XX
CC   The invention describes an isolated polynucleotide sequence comprising a
CC   paraxonase 2 (PON2) isogene. Primers and probes allow identification of
CC   this sequence and its polymorphisms and are useful for identifying which
CC   isoform of paraxonase 2 a person carries. Identification of a PON2
CC   isoform allows tailored pharmaceutical treatment to be designed and
CC   administered. PON2 is a particularly important gene for the treatment of
CC   coronary heart disease. This sequence represents an allele specific
CC   oligonucleotide (ASO) primer used for detecting PON2 gene polymorphisms,
CC   described in the method of the invention
XX
SQ   Sequence 15 BP; 8 A; 2 C; 1 G; 3 T; 0 U; 1 Other;

  Query Match             1.4%;  Score 12.6;  DB 1;  Length 15;
  Best Local Similarity   86.7%;  Pred. No. 1.8e+02;
  Matches   13;  Conservative    1;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        717 ATAAAACTCAGTTAA 731
              ||||||| |||||:|
Db          1 ATAAAACACAGTTHA 15


Search completed: April 14, 2005, 16:45:14
Job time : 2 secs
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GenCore version 5.1.6

OM nucleic - nucleic search, using sw model

Run on: April 14, 2005, 16:52:03 ; Search time 0.001 Seconds
(without alignments)
160.816 Million cell updates/sec

Title: US-10-672-866-3
Perfect score: 874
Sequence: 1 ctgcagcgtctggggtttcc.....tattaaaagaatccaaattc 874

Scoring table: IDENTITY_NUC
Gapop 10.0 , Gapext 0.5

Searched: 2 seqs, 92 residues

Total number of hits satisfying chosen parameters: 4

Minimum DB seq length: 8
Maximum DB seq length: 50

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 2 summaries

Database : rst3.seq:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	% Query Match	Length	DB	ID	Description
c 1	42.4	4.9	48	1	N79542	ACCESSION:N79542
2	36	4.1	44	1	H41186	ACCESSION:H41186

ALIGNMENTS

RESULT 1
N79542/c
LOCUS N79542 48 bp mRNA linear EST 29-MAR-1996
DEFINITION zb09h12.s1 Soares_fetal_lung_NbHL19W Homo sapiens cDNA clone IMAGE:301607 3' similar to gb:X02317 SUPEROXIDE DISMUTASE (HUMAN);, mRNA sequence.
ACCESSION N79542
VERSION N79542.1 GI:1242243
KEYWORDS EST.
SOURCE Homo sapiens (human)
ORGANISM Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE 1 (bases 1 to 48)
AUTHORS Hillier,L., Clark,N., Dubuque,T., Elliston,K., Hawkins,M., Holman,M., Hultman,M., Kucaba,T., Le,M., Lennon,G., Marra,M., Parsons,J., Rifkin,L., Rohlfing,T., Soares,M., Tan,F., Trevaskis,E., Waterston,R., Williamson,A., Wohldmann,P. and Wilson,R.
TITLE The WashU-Merck EST Project
JOURNAL Unpublished (1995)
COMMENT Contact: Wilson RK
Washington University School of Medicine
4444 Forest Park Parkway, Box 8501, St. Louis, MO 63108
Tel: 314 286 1800
Fax: 314 286 1810
Email: est@watson.wustl.edu
This clone is available royalty-free through LLNL ; contact the IMAGE Consortium (info@image.llnl.gov) for further information.
Trace considered overall poor quality
Seq primer: m13 -40 forward
High quality sequence stop: 1.
FEATURES Location/Qualifiers
source 1. .48
/organism="Homo sapiens"
/mol_type="mRNA"
/db_xref="GDB:1246531"
/db_xref="taxon:9606"
/clone="IMAGE:301607"
/dev_stage="19 weeks"
/lab_host="DH10B (ampicillin resistant)"
/clone_lib="Soares_fetal_lung_NbHL19W"
/note="Organ: lung; Vector: pT7T3D (Pharmacia) with a modified polylinker; Site_1: Not I; Site_2: Eco RI; 1st strand cDNA was primed with a Not I - oligo(dT) primer [5'-TGTTACCAATCTGAAGTGGGAGCGGCCGCAATTTTTTTTTTTTTTTT-3'], double-stranded cDNA was size selected, ligated to Eco RI adapters (Pharmacia), digested with Not I and cloned into the Not I and Eco RI sites of a modified pT7T3 vector (Pharmacia). Library went through one round of normalization to a Cot = 5. Library constructed by Bento Soares and M.Fatima Bonaldo. This library was constructed from the same fetus as the fetal heart library, Soares fetal heart NbHH19W."

Query Match 4.9%; Score 42.4; DB 1; Length 48;
Best Local Similarity 89.6%; Pred. No. 0;
Matches 43; Conservative 0; Mismatches 5; Indels 0; Gaps 0;

```
Qy        533 TTCCCTTGGATGTAGTCTGAGGCCCCTTAACTCATCTGTTATCCTGCT 580
              |||||| || |||||||||||||||||| || |||||||| |||||||
Db         48 TTCCCTNGGTTGTAGTCTGAGGCCCCTTNACNCATCTGTTNTCCTGCT 1
```

RESULT 2
H41186
LOCUS H41186 44 bp mRNA linear EST 31-JUL-1995
DEFINITION yn88b11.r1 Soares adult brain N2b5HB55Y Homo sapiens cDNA clone IMAGE:175485 5' similar to gb:X02317 SUPEROXIDE DISMUTASE (HUMAN);, mRNA sequence.
ACCESSION H41186
VERSION H41186.1 GI:917238
KEYWORDS EST.
SOURCE Homo sapiens (human)
ORGANISM Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE 1 (bases 1 to 44)
AUTHORS Hillier,L., Clark,N., Dubuque,T., Elliston,K., Hawkins,M., Holman,M., Hultman,M., Kucaba,T., Le,M., Lennon,G., Marra,M., Parsons,J., Rifkin,L., Rohlfing,T., Soares,M., Tan,F., Trevaskis,E., Waterston,R., Williamson,A., Wohldmann,P. and Wilson,R.
TITLE The WashU-Merck EST Project
JOURNAL Unpublished (1995)
COMMENT Contact: Wilson RK
Washington University School of Medicine
4444 Forest Park Parkway, Box 8501, St. Louis, MO 63108
Tel: 314 286 1800
Fax: 314 286 1810
Email: est@watson.wustl.edu
Insert Size: 1582
High quality sequence starts: 1
High quality sequence stops: 1
Source: IMAGE Consortium, LLNL
This clone is available royalty-free through LLNL ; contact the IMAGE Consortium (info@image.llnl.gov) for further information.
Trace considered overall poor quality
Insert Length: 1582 Std Error: 0.00

```
          Seq primer: M13RP1
          High quality sequence stop: 1.
FEATURES             Location/Qualifiers
     source          1. .44
                     /organism="Homo sapiens"
                     /mol_type="mRNA"
                     /db_xref="GDB:3837520"
                     /db_xref="taxon:9606"
                     /clone="IMAGE:175485"
                     /sex="Male"
                     /dev_stage="55-year old"
                     /lab_host="DH10B (ampicillin resistant)"
                     /clone_lib="Soares adult brain N2b5HB55Y"
                     /note="Organ: brain; Vector: pT7T3D (Pharmacia) with a
                     modified polylinker; Site_1: Not I; Site_2: Eco RI; 1st
                     strand cDNA was primed with a Not I - oligo(dT) primer [5'
                     TGTTACCAATCTGAAGTGGGAGCGGCCGCGCTTTTTTTTTTTTTTTTT 3'],
                     double-stranded cDNA was size selected, ligated to Eco RI
                     adapters (Pharmacia), digested with Not I and cloned into
                     the Not I and Eco RI sites of a modified pT7T3 vector
                     (Pharmacia). Library went through one round of
                     normalization to a Cot = 53. Library constructed by Bento
                     Soares and M.Fatima Bonaldo. The adult brain RNA was
                     provided by Dr. Donald H. Gilden. Tissue was acquired
                     17-18 hours after death which occurred in consequence of a
                     ruptured aortic aneurysm. RNA was prepared from a pool of
                     tissues representing the following areas of the brain:
                     frontal, parietal, temporal and occipital cortex from the
                     left and right hemispheres, subcortical white matter,
                     basal ganglia, thalamus, cerebellum, midbrain, pons and
                     medulla."

  Query Match             4.1%;  Score 36;  DB 1;  Length 44;
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Db          1 AATATTACTGCTGACAAATATAGTGTGGCCTATGTGTCTATTGA 44


Search completed: April 14, 2005, 16:52:04
Job time : 1 secs
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```
CC   targeted to a nucleic acid molecule encoding human superoxide dismutase
CC   1. The compound specifically hybridises with and inhibits the expression
CC   of human superoxide dismutase 1 by hybridising with at least an 8-
CC   nucleobase portion of the nucleic acid molecule encoding the active site
CC   of the enzyme. The activity of compounds of the invention may be
CC   described as neuroprotective, cytostatic and antiinflammatory. The
CC   mechanism of action of compounds of the invention is antisense inhibition
CC   of human superoxide dismutase 1 expression by chimeric phosphorothioate
CC   oligonucleotides having 2'-methoxyethyl (2'-MOE) wings and a deoxy gap.
CC   Compounds of the invention are useful for inhibiting the expression of
CC   human superoxide dismutase 1 in human cells or tissues, and for treating
CC   a disease or condition associated with this enzyme (antisense therapy),
CC   especially amyotrophic lateral sclerosis, a disease or condition arising
CC   from aberrant apoptosis and a hyperproliferative disorder. It may also be
CC   used in diagnostics, therapeutics and as a research reagent, e.g.
CC   prophylactically to prevent or delay infection, inflammation or tumour
CC   formation. Sequences given in records ACC40880-ACC40957 represent human
CC   superoxide dismutase 1 antisense inhibitor oligonucleotides
XX
SQ   Sequence 20 BP; 4 A; 9 C; 4 G; 3 T; 0 U; 0 Other;

  Query Match             2.3%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 60;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy         81 TGTGCGTGCTGAAGGGCGAC 100
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Db         20 TGTGCGTGCTGAAGGGCGAC 1


RESULT 53
ACC40903/c
ID   ACC40903 standard; DNA; 20 BP.
XX
AC   ACC40903;
XX
DT   23-MAY-2003  (first entry)
XX
DE   Human superoxide dismutase 1 antisense inhibitor # ISIS 150457.
XX
KW   Human; superoxide dismutase 1; antisense; neuroprotective; cytostatic;
KW   antiinflammatory; amyotrophic lateral sclerosis; apoptosis;
KW   hyperproliferative disorder; therapy; infection; inflammation; tumour;
KW   ss.
XX
OS   Homo sapiens.
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   modified_base    1. .20
FT                    /*tag=  a
FT                    /mod_base= OTHER
FT                    /note= "Phosphorothioate linkages. All cytosines are 5-
FT                    methylcytosine"
FT   modified_base    1. .5
FT                    /*tag=  b
FT                    /mod_base= OTHER
FT                    /note= "2'-methoxyethyl (2'-MOE) nucleotides"
FT   modified_base    16. .20
FT                    /*tag=  c
FT                    /mod_base= OTHER
FT                    /note= "2'-methoxyethyl (2'-MOE) nucleotides"
XX
PN   WO2003000707-A2.
XX
PD   03-JAN-2003.
XX
PF   19-JUN-2002; 2002WO-US019664.
XX
PR   21-JUN-2001; 2001US-00888360.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Bennett FC,  Dobie K;
XX
DR   WPI; 2003-184032/18.
XX
PT   Novel antisense compounds targeted to nucleic acids encoding human
PT   superoxide dismutase 1, for modulating expression of the dismutase and
PT   treating diseases or conditions, e.g. amyotrophic lateral sclerosis.
XX
PS   Claim 3; Page 76; 107pp; English.
XX
CC   The invention relates to a compound of 8-50 nucleobases in length,
CC   targeted to a nucleic acid molecule encoding human superoxide dismutase
CC   1. The compound specifically hybridises with and inhibits the expression
CC   of human superoxide dismutase 1 by hybridising with at least an 8-
CC   nucleobase portion of the nucleic acid molecule encoding the active site
CC   of the enzyme. The activity of compounds of the invention may be
CC   described as neuroprotective, cytostatic and antiinflammatory. The
CC   mechanism of action of compounds of the invention is antisense inhibition
CC   of human superoxide dismutase 1 expression by chimeric phosphorothioate
CC   oligonucleotides having 2'-methoxyethyl (2'-MOE) wings and a deoxy gap.
CC   Compounds of the invention are useful for inhibiting the expression of
CC   human superoxide dismutase 1 in human cells or tissues, and for treating
CC   a disease or condition associated with this enzyme (antisense therapy),
CC   especially amyotrophic lateral sclerosis, a disease or condition arising
CC   from aberrant apoptosis and a hyperproliferative disorder. It may also be
CC   used in diagnostics, therapeutics and as a research reagent, e.g.
CC   prophylactically to prevent or delay infection, inflammation or tumour
CC   formation. Sequences given in records ACC40880-ACC40957 represent human
CC   superoxide dismutase 1 antisense inhibitor oligonucleotides
XX
SQ   Sequence 20 BP; 4 A; 8 C; 3 G; 5 T; 0 U; 0 Other;

  Query Match             2.3%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 60;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        337 CAAAGATGGTGTGGCCGATG 356
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Db         20 CAAAGATGGTGTGGCCGATG 1


RESULT 54
ACC40920/c
ID   ACC40920 standard; DNA; 20 BP.
XX
AC   ACC40920;
XX
DT   23-MAY-2003  (first entry)
XX
DE   Human superoxide dismutase 1 antisense inhibitor # ISIS 150474.
XX
KW   Human; superoxide dismutase 1; antisense; neuroprotective; cytostatic;
KW   antiinflammatory; amyotrophic lateral sclerosis; apoptosis;
KW   hyperproliferative disorder; therapy; infection; inflammation; tumour;
KW   ss.
XX
OS   Homo sapiens.
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   modified_base    1. .20
FT                    /*tag=  a
FT                    /mod_base= OTHER
FT                    /note= "Phosphorothioate linkages. All cytosines are 5-
FT                    methylcytosine"
FT   modified_base    1. .5
FT                    /*tag=  b
FT                    /mod_base= OTHER
FT                    /note= "2'-methoxyethyl (2'-MOE) nucleotides"
FT   modified_base    16. .20
FT                    /*tag=  c
FT                    /mod_base= OTHER
FT                    /note= "2'-methoxyethyl (2'-MOE) nucleotides"
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  Best Local Similarity   100.0%;  Pred. No. 60;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        658 TTTAAAGTACCTGTAGTGAG 677
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Db         20 TTTAAAGTACCTGTAGTGAG 1


RESULT 51
ACC40940/c
ID   ACC40940 standard; DNA; 20 BP.
XX
AC   ACC40940;
XX
DT   23-MAY-2003  (first entry)
XX
DE   Human superoxide dismutase 1 antisense inhibitor # ISIS 150494.
XX
KW   Human; superoxide dismutase 1; antisense; neuroprotective; cytostatic;
KW   antiinflammatory; amyotrophic lateral sclerosis; apoptosis;
KW   hyperproliferative disorder; therapy; infection; inflammation; tumour;
KW   ss.
XX
OS   Homo sapiens.
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   modified_base   1. .20
FT                   /*tag=  a
FT                   /mod_base= OTHER
FT                   /note= "Phosphorothioate linkages. All cytosines are 5-
FT                   methylcytosine"
FT   modified_base   1. .5
FT                   /*tag=  b
FT                   /mod_base= OTHER
FT                   /note= "2'-methoxyethyl (2'-MOE) nucleotides"
FT   modified_base   16. .20
FT                   /*tag=  c
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FT                   /note= "2'-methoxyethyl (2'-MOE) nucleotides"
XX
PN   WO2003000707-A2.
XX
PD   03-JAN-2003.
XX
PF   19-JUN-2002; 2002WO-US019664.
XX
PR   21-JUN-2001; 2001US-00888360.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Bennett FC,  Dobie K;
XX
DR   WPI; 2003-184032/18.
XX
PT   Novel antisense compounds targeted to nucleic acids encoding human
PT   superoxide dismutase 1, for modulating expression of the dismutase and
PT   treating diseases or conditions, e.g. amyotrophic lateral sclerosis.
XX
PS   Example 15; Page 77; 107pp; English.
XX
CC   The invention relates to a compound of 8-50 nucleobases in length,
CC   targeted to a nucleic acid molecule encoding human superoxide dismutase
CC   1. The compound specifically hybridises with and inhibits the expression
CC   of human superoxide dismutase 1 by hybridising with at least an 8-
CC   nucleobase portion of the nucleic acid molecule encoding the active site
CC   of the enzyme. The activity of compounds of the invention may be
CC   described as neuroprotective, cytostatic and antiinflammatory. The
CC   mechanism of action of compounds of the invention is antisense inhibition
CC   of human superoxide dismutase 1 expression by chimeric phosphorothioate
CC   oligonucleotides having 2'-methoxyethyl (2'-MOE) wings and a deoxy gap.
CC   Compounds of the invention are useful for inhibiting the expression of
CC   human superoxide dismutase 1 in human cells or tissues, and for treating
CC   a disease or condition associated with this enzyme (antisense therapy),
CC   especially amyotrophic lateral sclerosis, a disease or condition arising
CC   from aberrant apoptosis and a hyperproliferative disorder. It may also be
CC   used in diagnostics, therapeutics and as a research reagent, e.g.
CC   prophylactically to prevent or delay infection, inflammation or tumour
CC   formation. Sequences given in records ACC40880-ACC40957 represent human
CC   superoxide dismutase 1 antisense inhibitor oligonucleotides
XX
SQ   Sequence 20 BP; 8 A; 4 C; 3 G; 5 T; 0 U; 0 Other;

  Query Match             2.3%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 60;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        832 CTGTATGGCACTTATTATGA 851
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Db         20 CTGTATGGCACTTATTATGA 1


RESULT 52
ACC40882/c
ID   ACC40882 standard; DNA; 20 BP.
XX
AC   ACC40882;
XX
DT   23-MAY-2003  (first entry)
XX
DE   Human superoxide dismutase 1 antisense inhibitor # ISIS 146145.
XX
KW   Human; superoxide dismutase 1; antisense; neuroprotective; cytostatic;
KW   antiinflammatory; amyotrophic lateral sclerosis; apoptosis;
KW   hyperproliferative disorder; therapy; infection; inflammation; tumour;
KW   ss.
XX
OS   Homo sapiens.
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   modified_base   1. .20
FT                   /*tag=  a
FT                   /mod_base= OTHER
FT                   /note= "Phosphorothioate linkages. All cytosines are 5-
FT                   methylcytosine"
FT   modified_base   1. .5
FT                   /*tag=  b
FT                   /mod_base= OTHER
FT                   /note= "2'-methoxyethyl (2'-MOE) nucleotides"
FT   modified_base   16. .20
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FT                   /mod_base= OTHER
FT                   /note= "2'-methoxyethyl (2'-MOE) nucleotides"
XX
PN   WO2003000707-A2.
XX
PD   03-JAN-2003.
XX
PF   19-JUN-2002; 2002WO-US019664.
XX
PR   21-JUN-2001; 2001US-00888360.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Bennett FC,  Dobie K;
XX
DR   WPI; 2003-184032/18.
XX
PT   Novel antisense compounds targeted to nucleic acids encoding human
PT   superoxide dismutase 1, for modulating expression of the dismutase and
PT   treating diseases or conditions, e.g. amyotrophic lateral sclerosis.
XX
PS   Claim 3; Page 76; 107pp; English.
XX
CC   The invention relates to a compound of 8-50 nucleobases in length,
```

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XX
OS   Homo sapiens.
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   modified_base   1. .20
FT                   /*tag=  a
FT                   /mod_base= OTHER
FT                   /note= "Phosphorothioate linkages. All cytosines are 5-
FT                   methylcytosine"
FT   modified_base   1. .5
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PN   WO2003000707-A2.
XX
PD   03-JAN-2003.
XX
PF   19-JUN-2002; 2002WO-US019664.
XX
PR   21-JUN-2001; 2001US-00888360.
XX
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XX
PI   Bennett FC,  Dobie K;
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DR   WPI; 2003-184032/18.
XX
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XX
PS   Example 15; Page 77; 107pp; English.
XX
CC   The invention relates to a compound of 8-50 nucleobases in length,
CC   targeted to a nucleic acid molecule encoding human superoxide dismutase
CC   1. The compound specifically hybridises with and inhibits the expression
CC   of human superoxide dismutase 1 by hybridising with at least an 8-
CC   nucleobase portion of the nucleic acid molecule encoding the active site
CC   of the enzyme. The activity of compounds of the invention may be
CC   described as neuroprotective, cytostatic and antiinflammatory. The
CC   mechanism of action of compounds of the invention is antisense inhibition
CC   of human superoxide dismutase 1 expression by chimeric phosphorothioate
CC   oligonucleotides having 2'-methoxyethyl (2'-MOE) wings and a deoxy gap.
CC   Compounds of the invention are useful for inhibiting the expression of
CC   human superoxide dismutase 1 in human cells or tissues, and for treating
CC   a disease or condition associated with this enzyme (antisense therapy),
CC   especially amyotrophic lateral sclerosis, a disease or condition arising
CC   from aberrant apoptosis and a hyperproliferative disorder. It may also be
CC   used in diagnostics, therapeutics and as a research reagent, e.g.
CC   prophylactically to prevent or delay infection, inflammation or tumour
CC   formation. Sequences given in records ACC40880-ACC40957 represent human
CC   superoxide dismutase 1 antisense inhibitor oligonucleotides
XX
SQ   Sequence 20 BP; 8 A; 4 C; 1 G; 7 T; 0 U; 0 Other;

  Query Match             2.3%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 60;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        620 ATCTTAAAAGTGTAATTGTG 639
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Db         20 ATCTTAAAAGTGTAATTGTG 1

RESULT 50
ACC40915/c
ID   ACC40915 standard; DNA; 20 BP.
XX
AC   ACC40915;
XX
DT   23-MAY-2003  (first entry)
XX
DE   Human superoxide dismutase 1 antisense inhibitor # ISIS 150469.
XX
KW   Human; superoxide dismutase 1; antisense; neuroprotective; cytostatic;
KW   antiinflammatory; amyotrophic lateral sclerosis; apoptosis;
KW   hyperproliferative disorder; therapy; infection; inflammation; tumour;
KW   ss.
XX
OS   Homo sapiens.
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   modified_base   1. .20
FT                   /*tag=  a
FT                   /mod_base= OTHER
FT                   /note= "Phosphorothioate linkages. All cytosines are 5-
FT                   methylcytosine"
FT   modified_base   1. .5
FT                   /*tag=  b
FT                   /mod_base= OTHER
FT                   /note= "2'-methoxyethyl (2'-MOE) nucleotides"
FT   modified_base   16. .20
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XX
PN   WO2003000707-A2.
XX
PD   03-JAN-2003.
XX
PF   19-JUN-2002; 2002WO-US019664.
XX
PR   21-JUN-2001; 2001US-00888360.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Bennett FC,  Dobie K;
XX
DR   WPI; 2003-184032/18.
XX
PT   Novel antisense compounds targeted to nucleic acids encoding human
PT   superoxide dismutase 1, for modulating expression of the dismutase and
PT   treating diseases or conditions, e.g. amyotrophic lateral sclerosis.
XX
PS   Claim 3; Page 77; 107pp; English.
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CC   The invention relates to a compound of 8-50 nucleobases in length,
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CC   nucleobase portion of the nucleic acid molecule encoding the active site
CC   of the enzyme. The activity of compounds of the invention may be
CC   described as neuroprotective, cytostatic and antiinflammatory. The
CC   mechanism of action of compounds of the invention is antisense inhibition
CC   of human superoxide dismutase 1 expression by chimeric phosphorothioate
CC   oligonucleotides having 2'-methoxyethyl (2'-MOE) wings and a deoxy gap.
CC   Compounds of the invention are useful for inhibiting the expression of
CC   human superoxide dismutase 1 in human cells or tissues, and for treating
CC   a disease or condition associated with this enzyme (antisense therapy),
CC   especially amyotrophic lateral sclerosis, a disease or condition arising
CC   from aberrant apoptosis and a hyperproliferative disorder. It may also be
CC   used in diagnostics, therapeutics and as a research reagent, e.g.
CC   prophylactically to prevent or delay infection, inflammation or tumour
CC   formation. Sequences given in records ACC40880-ACC40957 represent human
CC   superoxide dismutase 1 antisense inhibitor oligonucleotides
XX
SQ   Sequence 20 BP; 7 A; 5 C; 2 G; 6 T; 0 U; 0 Other;

  Query Match             2.3%;  Score 20;  DB 1;  Length 20;
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XX
PF   19-JUN-2002; 2002WO-US019664.
XX
PR   21-JUN-2001; 2001US-00888360.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Bennett FC,  Dobie K;
XX
DR   WPI; 2003-184032/18.
XX
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PT   treating diseases or conditions, e.g. amyotrophic lateral sclerosis.
XX
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XX
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CC   1. The compound specifically hybridises with and inhibits the expression
CC   of human superoxide dismutase 1 by hybridising with at least an 8-
CC   nucleobase portion of the nucleic acid molecule encoding the active site
CC   of the enzyme. The activity of compounds of the invention may be
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CC   mechanism of action of compounds of the invention is antisense inhibition
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CC   especially amyotrophic lateral sclerosis, a disease or condition arising
CC   from aberrant apoptosis and a hyperproliferative disorder. It may also be
CC   used in diagnostics, therapeutics and as a research reagent, e.g.
CC   prophylactically to prevent or delay infection, inflammation or tumour
CC   formation. Sequences given in records ACC40880-ACC40957 represent human
CC   superoxide dismutase 1 antisense inhibitor oligonucleotides
XX
SQ   Sequence 20 BP; 4 A; 6 C; 6 G; 4 T; 0 U; 0 Other;

  Query Match             2.3%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 60;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        410 CGCACACTGGTGGTCCATGA 429
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Db         20 CGCACACTGGTGGTCCATGA 1


RESULT 48
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ID   ACC40911 standard; DNA; 20 BP.
XX
AC   ACC40911;
XX
DT   23-MAY-2003  (first entry)
XX
DE   Human superoxide dismutase 1 antisense inhibitor # ISIS 150465.
XX
KW   Human; superoxide dismutase 1; antisense; neuroprotective; cytostatic;
KW   antiinflammatory; amyotrophic lateral sclerosis; apoptosis;
KW   hyperproliferative disorder; therapy; infection; inflammation; tumour;
KW   ss.
XX
OS   Homo sapiens.
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   modified_base    1. .20
FT                    /*tag=  a
FT                    /mod_base= OTHER
FT                    /note= "Phosphorothioate linkages. All cytosines are 5-
FT                    methylcytosine"
FT   modified_base    1. .5
FT                    /*tag=  b
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FT                    /note= "2'-methoxyethyl (2'-MOE) nucleotides"
FT   modified_base    16. .20
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XX
PN   WO2003000707-A2.
XX
PD   03-JAN-2003.
XX
PF   19-JUN-2002; 2002WO-US019664.
XX
PR   21-JUN-2001; 2001US-00888360.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Bennett FC,  Dobie K;
XX
DR   WPI; 2003-184032/18.
XX
PT   Novel antisense compounds targeted to nucleic acids encoding human
PT   superoxide dismutase 1, for modulating expression of the dismutase and
PT   treating diseases or conditions, e.g. amyotrophic lateral sclerosis.
XX
PS   Example 15; Page 77; 107pp; English.
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CC   The invention relates to a compound of 8-50 nucleobases in length,
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CC   of human superoxide dismutase 1 by hybridising with at least an 8-
CC   nucleobase portion of the nucleic acid molecule encoding the active site
CC   of the enzyme. The activity of compounds of the invention may be
CC   described as neuroprotective, cytostatic and antiinflammatory. The
CC   mechanism of action of compounds of the invention is antisense inhibition
CC   of human superoxide dismutase 1 expression by chimeric phosphorothioate
CC   oligonucleotides having 2'-methoxyethyl (2'-MOE) wings and a deoxy gap.
CC   Compounds of the invention are useful for inhibiting the expression of
CC   human superoxide dismutase 1 in human cells or tissues, and for treating
CC   a disease or condition associated with this enzyme (antisense therapy),
CC   especially amyotrophic lateral sclerosis, a disease or condition arising
CC   from aberrant apoptosis and a hyperproliferative disorder. It may also be
CC   used in diagnostics, therapeutics and as a research reagent, e.g.
CC   prophylactically to prevent or delay infection, inflammation or tumour
CC   formation. Sequences given in records ACC40880-ACC40957 represent human
CC   superoxide dismutase 1 antisense inhibitor oligonucleotides
XX
SQ   Sequence 20 BP; 6 A; 7 C; 4 G; 3 T; 0 U; 0 Other;

  Query Match             2.3%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 60;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        535 CCCTTGGATGTAGTCTGAGG 554
              ||||||||||||||||||||
Db         20 CCCTTGGATGTAGTCTGAGG 1


RESULT 49
ACC40913/c
ID   ACC40913 standard; DNA; 20 BP.
XX
AC   ACC40913;
XX
DT   23-MAY-2003  (first entry)
XX
DE   Human superoxide dismutase 1 antisense inhibitor # ISIS 150467.
XX
KW   Human; superoxide dismutase 1; antisense; neuroprotective; cytostatic;
KW   antiinflammatory; amyotrophic lateral sclerosis; apoptosis;
KW   hyperproliferative disorder; therapy; infection; inflammation; tumour;
KW   ss.
```

```
CC   of the enzyme. The activity of compounds of the invention may be
CC   described as neuroprotective, cytostatic and antiinflammatory. The
CC   mechanism of action of compounds of the invention is antisense inhibition
CC   of human superoxide dismutase 1 expression by chimeric phosphorothioate
CC   oligonucleotides having 2'-methoxyethyl (2'-MOE) wings and a deoxy gap.
CC   Compounds of the invention are useful for inhibiting the expression of
CC   human superoxide dismutase 1 in human cells or tissues, and for treating
CC   a disease or condition associated with this enzyme (antisense therapy),
CC   especially amyotrophic lateral sclerosis, a disease or condition arising
CC   from aberrant apoptosis and a hyperproliferative disorder. It may also be
CC   used in diagnostics, therapeutics and as a research reagent, e.g.
CC   prophylactically to prevent or delay infection, inflammation or tumour
CC   formation. Sequences given in records ACC40880-ACC40957 represent human
CC   superoxide dismutase 1 antisense inhibitor oligonucleotides
XX
SQ   Sequence 20 BP; 4 A; 9 C; 2 G; 5 T; 0 U; 0 Other;

  Query Match             2.3%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 60;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        144 ATGGACCAGTGAAGGTGTGG 163
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Db         20 ATGGACCAGTGAAGGTGTGG 1


RESULT 46
ACC40904/c
ID   ACC40904 standard; DNA; 20 BP.
XX
AC   ACC40904;
XX
DT   23-MAY-2003  (first entry)
XX
DE   Human superoxide dismutase 1 antisense inhibitor # ISIS 150458.
XX
KW   Human; superoxide dismutase 1; antisense; neuroprotective; cytostatic;
KW   antiinflammatory; amyotrophic lateral sclerosis; apoptosis;
KW   hyperproliferative disorder; therapy; infection; inflammation; tumour;
KW   ss.
XX
OS   Homo sapiens.
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   modified_base   1. .20
FT                   /*tag=  a
FT                   /mod_base= OTHER
FT                   /note= "Phosphorothioate linkages. All cytosines are 5-
FT                   methylcytosine"
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FT                   /mod_base= OTHER
FT                   /note= "2'-methoxyethyl (2'-MOE) nucleotides"
XX
PN   WO2003000707-A2.
XX
PD   03-JAN-2003.
XX
PF   19-JUN-2002; 2002WO-US019664.
XX
PR   21-JUN-2001; 2001US-00888360.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Bennett FC,  Dobie K;
XX
DR   WPI; 2003-184032/18.
XX
PT   Novel antisense compounds targeted to nucleic acids encoding human
PT   superoxide dismutase 1, for modulating expression of the dismutase and
PT   treating diseases or conditions, e.g. amyotrophic lateral sclerosis.
XX
PS   Claim 3; Page 77; 107pp; English.
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CC   The invention relates to a compound of 8-50 nucleobases in length,
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CC   of human superoxide dismutase 1 by hybridising with at least an 8-
CC   nucleobase portion of the nucleic acid molecule encoding the active site
CC   of the enzyme. The activity of compounds of the invention may be
CC   described as neuroprotective, cytostatic and antiinflammatory. The
CC   mechanism of action of compounds of the invention is antisense inhibition
CC   of human superoxide dismutase 1 expression by chimeric phosphorothioate
CC   oligonucleotides having 2'-methoxyethyl (2'-MOE) wings and a deoxy gap.
CC   Compounds of the invention are useful for inhibiting the expression of
CC   human superoxide dismutase 1 in human cells or tissues, and for treating
CC   a disease or condition associated with this enzyme (antisense therapy),
CC   especially amyotrophic lateral sclerosis, a disease or condition arising
CC   from aberrant apoptosis and a hyperproliferative disorder. It may also be
CC   used in diagnostics, therapeutics and as a research reagent, e.g.
CC   prophylactically to prevent or delay infection, inflammation or tumour
CC   formation. Sequences given in records ACC40880-ACC40957 represent human
CC   superoxide dismutase 1 antisense inhibitor oligonucleotides
XX
SQ   Sequence 20 BP; 6 A; 9 C; 2 G; 3 T; 0 U; 0 Other;

  Query Match             2.3%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 60;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

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Db         20 AGATGGTGTGGCCGATGTGT 1


RESULT 47
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ID   ACC40908 standard; DNA; 20 BP.
XX
AC   ACC40908;
XX
DT   23-MAY-2003  (first entry)
XX
DE   Human superoxide dismutase 1 antisense inhibitor # ISIS 150462.
XX
KW   Human; superoxide dismutase 1; antisense; neuroprotective; cytostatic;
KW   antiinflammatory; amyotrophic lateral sclerosis; apoptosis;
KW   hyperproliferative disorder; therapy; infection; inflammation; tumour;
KW   ss.
XX
OS   Homo sapiens.
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
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FT                   /*tag=  a
FT                   /mod_base= OTHER
FT                   /note= "Phosphorothioate linkages. All cytosines are 5-
FT                   methylcytosine"
FT   modified_base   1. .5
FT                   /*tag=  b
FT                   /mod_base= OTHER
FT                   /note= "2'-methoxyethyl (2'-MOE) nucleotides"
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XX
PN   WO2003000707-A2.
XX
PD   03-JAN-2003.
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Db          20 TCTTTGTCATTCAAGCCTGT 1


RESULT 44
ACC40936/c
ID   ACC40936 standard; DNA; 20 BP.
XX
AC   ACC40936;
XX
DT   23-MAY-2003  (first entry)
XX
DE   Human superoxide dismutase 1 antisense inhibitor # ISIS 150490.
XX
KW   Human; superoxide dismutase 1; antisense; neuroprotective; cytostatic;
KW   antiinflammatory; amyotrophic lateral sclerosis; apoptosis;
KW   hyperproliferative disorder; therapy; infection; inflammation; tumour;
KW   ss.
XX
OS   Homo sapiens.
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   modified_base   1. .20
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FT   modified_base   16. .20
FT                   /*tag=  c
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FT                   /note= "2'-methoxyethyl (2'-MOE) nucleotides"
XX
PN   WO2003000707-A2.
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XX
PF   19-JUN-2002; 2002WO-US019664.
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CC   from aberrant apoptosis and a hyperproliferative disorder. It may also be
CC   used in diagnostics, therapeutics and as a research reagent, e.g.
CC   prophylactically to prevent or delay infection, inflammation or tumour
CC   formation. Sequences given in records ACC40880-ACC40957 represent human
CC   superoxide dismutase 1 antisense inhibitor oligonucleotides
XX
SQ   Sequence 20 BP; 6 A; 3 C; 3 G; 8 T; 0 U; 0 Other;

  Query Match              2.3%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 60;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        818 TGTGAATAAAAACCCTGTAT 837
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Db         20 TGTGAATAAAAACCCTGTAT 1


RESULT 45
ACC40893/c
ID   ACC40893 standard; DNA; 20 BP.
XX
AC   ACC40893;
XX
DT   23-MAY-2003  (first entry)
XX
DE   Human superoxide dismutase 1 antisense inhibitor # ISIS 150447.
XX
KW   Human; superoxide dismutase 1; antisense; neuroprotective; cytostatic;
KW   antiinflammatory; amyotrophic lateral sclerosis; apoptosis;
KW   hyperproliferative disorder; therapy; infection; inflammation; tumour;
KW   ss.
XX
OS   Homo sapiens.
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   modified_base   1. .20
FT                   /*tag=  a
FT                   /mod_base= OTHER
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FT                   methylcytosine"
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FT                   /mod_base= OTHER
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FT   modified_base   16. .20
FT                   /*tag=  c
FT                   /mod_base= OTHER
FT                   /note= "2'-methoxyethyl (2'-MOE) nucleotides"
XX
PN   WO2003000707-A2.
XX
PD   03-JAN-2003.
XX
PF   19-JUN-2002; 2002WO-US019664.
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PR   21-JUN-2001; 2001US-00888360.
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XX
PI   Bennett FC,  Dobie K;
XX
DR   WPI; 2003-184032/18.
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XX
PS   Example 15; Page 76; 107pp; English.
XX
CC   The invention relates to a compound of 8-50 nucleobases in length,
CC   targeted to a nucleic acid molecule encoding human superoxide dismutase
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CC   of human superoxide dismutase 1 by hybridising with at least an 8-
CC   nucleobase portion of the nucleic acid molecule encoding the active site
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FH   Key             Location/Qualifiers
FT   modified_base   1. .20
FT                   /*tag=  a
FT                   /mod_base= OTHER
FT                   /note= "Phosphorothioate linkages. All cytosines are 5-
FT                   methylcytosine"
FT   modified_base   1. .5
FT                   /*tag=  b
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FT                   /note= "2'-methoxyethyl (2'-MOE) nucleotides"
FT   modified_base   16. .20
FT                   /*tag=  c
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FT                   /note= "2'-methoxyethyl (2'-MOE) nucleotides"
XX
PN   WO2003000707-A2.
XX
PD   03-JAN-2003.
XX
PF   19-JUN-2002; 2002WO-US019664.
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PR   21-JUN-2001; 2001US-00888360.
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CC   superoxide dismutase 1 antisense inhibitor oligonucleotides
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SQ   Sequence 20 BP; 8 A; 6 C; 1 G; 5 T; 0 U; 0 Other;

  Query Match             2.3%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 60;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        205 TGTTCATGAGTTTGGAGATA 224
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Db         20 TGTTCATGAGTTTGGAGATA 1


RESULT 43
ACC40932/c
ID   ACC40932 standard; DNA; 20 BP.
XX
AC   ACC40932;
XX
DT   23-MAY-2003  (first entry)
XX
DE   Human superoxide dismutase 1 antisense inhibitor # ISIS 150486.
XX
KW   Human; superoxide dismutase 1; antisense; neuroprotective; cytostatic;
KW   antiinflammatory; amyotrophic lateral sclerosis; apoptosis;
KW   hyperproliferative disorder; therapy; infection; inflammation; tumour;
KW   ss.
XX
OS   Homo sapiens.
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   modified_base   1. .20
FT                   /*tag=  a
FT                   /mod_base= OTHER
FT                   /note= "Phosphorothioate linkages. All cytosines are 5-
FT                   methylcytosine"
FT   modified_base   1. .5
FT                   /*tag=  b
FT                   /mod_base= OTHER
FT                   /note= "2'-methoxyethyl (2'-MOE) nucleotides"
FT   modified_base   16. .20
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XX
PN   WO2003000707-A2.
XX
PD   03-JAN-2003.
XX
PF   19-JUN-2002; 2002WO-US019664.
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XX
SQ   Sequence 20 BP; 9 A; 3 C; 5 G; 3 T; 0 U; 0 Other;

  Query Match             2.3%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 60;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        801 TCTTTGTCATTCAAGCCTGT 820
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PI   Bennett FC,  Dobie K;
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DR   WPI; 2003-184032/18.
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XX
SQ   Sequence 20 BP; 9 A; 3 C; 3 G; 5 T; 0 U; 0 Other;

  Query Match             2.3%;  Score 20;  DB 1;  Length 20;
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Db         20 AACTTGTCAGAATTTCTTTG 1


RESULT 41
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ID   ACC40892 standard; DNA; 20 BP.
XX
AC   ACC40892;
XX
DT   23-MAY-2003  (first entry)
XX
DE   Human superoxide dismutase 1 antisense inhibitor # ISIS 150446.
XX
KW   Human; superoxide dismutase 1; antisense; neuroprotective; cytostatic;
KW   antiinflammatory; amyotrophic lateral sclerosis; apoptosis;
KW   hyperproliferative disorder; therapy; infection; inflammation; tumour;
KW   ss.
XX
OS   Homo sapiens.
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   modified_base   1. .20
FT                   /*tag=  a
FT                   /mod_base= OTHER
FT                   /note= "Phosphorothioate linkages. All cytosines are 5-
FT                   methylcytosine"
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XX
PN   WO2003000707-A2.
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PD   03-JAN-2003.
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CC   formation. Sequences given in records ACC40880-ACC40957 represent human
CC   superoxide dismutase 1 antisense inhibitor oligonucleotides
XX
SQ   Sequence 20 BP; 5 A; 7 C; 2 G; 6 T; 0 U; 0 Other;

  Query Match             2.3%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 60;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        142 TAATGGACCAGTGAAGGTGT 161
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Db         20 TAATGGACCAGTGAAGGTGT 1


RESULT 42
ACC40897/c
ID   ACC40897 standard; DNA; 20 BP.
XX
AC   ACC40897;
XX
DT   23-MAY-2003  (first entry)
XX
DE   Human superoxide dismutase 1 antisense inhibitor # ISIS 150451.
XX
KW   Human; superoxide dismutase 1; antisense; neuroprotective; cytostatic;
KW   antiinflammatory; amyotrophic lateral sclerosis; apoptosis;
KW   hyperproliferative disorder; therapy; infection; inflammation; tumour;
KW   ss.
XX
OS   Homo sapiens.
OS   Synthetic.
XX
```

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  Query Match             2.3%;  Score 20;  DB 1;  Length 20;
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Qy        556 CCCTTAACTCATCTGTTATC 575
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Db         20 CCCTTAACTCATCTGTTATC 1


RESULT 39
ACC40914/c
ID   ACC40914 standard; DNA; 20 BP.
XX
AC   ACC40914;
XX
DT   23-MAY-2003  (first entry)
XX
DE   Human superoxide dismutase 1 antisense inhibitor # ISIS 150468.
XX
KW   Human; superoxide dismutase 1; antisense; neuroprotective; cytostatic;
KW   antiinflammatory; amyotrophic lateral sclerosis; apoptosis;
KW   hyperproliferative disorder; therapy; infection; inflammation; tumour;
KW   ss.
XX
OS   Homo sapiens.
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   modified_base   1. .20
FT                   /*tag=  a
FT                   /mod_base= OTHER
FT                   /note= "Phosphorothioate linkages. All cytosines are 5-
FT                   methylcytosine"
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FT                   /note= "2'-methoxyethyl (2'-MOE) nucleotides"
FT   modified_base   16. .20
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  Best Local Similarity   100.0%;  Pred. No. 60;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        625 AAAAGTGTAATTGTGTGACT 644
              ||||||||||||||||||||
Db         20 AAAAGTGTAATTGTGTGACT 1


RESULT 40
ACC40930/c
ID   ACC40930 standard; DNA; 20 BP.
XX
AC   ACC40930;
XX
DT   23-MAY-2003  (first entry)
XX
DE   Human superoxide dismutase 1 antisense inhibitor # ISIS 150484.
XX
KW   Human; superoxide dismutase 1; antisense; neuroprotective; cytostatic;
KW   antiinflammatory; amyotrophic lateral sclerosis; apoptosis;
KW   hyperproliferative disorder; therapy; infection; inflammation; tumour;
KW   ss.
XX
OS   Homo sapiens.
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   modified_base   1. .20
FT                   /*tag=  a
FT                   /mod_base= OTHER
FT                   /note= "Phosphorothioate linkages. All cytosines are 5-
FT                   methylcytosine"
FT   modified_base   1. .5
FT                   /*tag=  b
FT                   /mod_base= OTHER
FT                   /note= "2'-methoxyethyl (2'-MOE) nucleotides"
FT   modified_base   16. .20
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XX
PN   WO2003000707-A2.
XX
PD   03-JAN-2003.
XX
PF   19-JUN-2002; 2002WO-US019664.
XX
PR   21-JUN-2001; 2001US-00888360.
```

```
RESULT 37
ACC40898/c
ID   ACC40898 standard; DNA; 20 BP.
XX
AC   ACC40898;
XX
DT   23-MAY-2003  (first entry)
XX
DE   Human superoxide dismutase 1 antisense inhibitor # ISIS 150452.
XX
KW   Human; superoxide dismutase 1; antisense; neuroprotective; cytostatic;
KW   antiinflammatory; amyotrophic lateral sclerosis; apoptosis;
KW   hyperproliferative disorder; therapy; infection; inflammation; tumour;
KW   ss.
XX
OS   Homo sapiens.
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   modified_base   1. .20
FT                   /*tag=  a
FT                   /mod_base= OTHER
FT                   /note= "Phosphorothioate linkages. All cytosines are 5-
FT                   methylcytosine"
FT   modified_base   1. .5
FT                   /*tag=  b
FT                   /mod_base= OTHER
FT                   /note= "2'-methoxyethyl (2'-MOE) nucleotides"
FT   modified_base   16. .20
FT                   /*tag=  c
FT                   /mod_base= OTHER
FT                   /note= "2'-methoxyethyl (2'-MOE) nucleotides"
XX
PN   WO2003000707-A2.
XX
PD   03-JAN-2003.
XX
PF   19-JUN-2002; 2002WO-US019664.
XX
PR   21-JUN-2001; 2001US-00888360.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Bennett FC,  Dobie K;
XX
DR   WPI; 2003-184032/18.
XX
PT   Novel antisense compounds targeted to nucleic acids encoding human
PT   superoxide dismutase 1, for modulating expression of the dismutase and
PT   treating diseases or conditions, e.g. amyotrophic lateral sclerosis.
XX
PS   Claim 3; Page 76; 107pp; English.
XX
CC   The invention relates to a compound of 8-50 nucleobases in length,
CC   targeted to a nucleic acid molecule encoding human superoxide dismutase
CC   1. The compound specifically hybridises with and inhibits the expression
CC   of human superoxide dismutase 1 by hybridising with at least an 8-
CC   nucleobase portion of the nucleic acid molecule encoding the active site
CC   of the enzyme. The activity of compounds of the invention may be
CC   described as neuroprotective, cytostatic and antiinflammatory. The
CC   mechanism of action of compounds of the invention is antisense inhibition
CC   of human superoxide dismutase 1 expression by chimeric phosphorothioate
CC   oligonucleotides having 2'-methoxyethyl (2'-MOE) wings and a deoxy gap.
CC   Compounds of the invention are useful for inhibiting the expression of
CC   human superoxide dismutase 1 in human cells or tissues, and for treating
CC   a disease or condition associated with this enzyme (antisense therapy),
CC   especially amyotrophic lateral sclerosis, a disease or condition arising
CC   from aberrant apoptosis and a hyperproliferative disorder. It may also be
CC   used in diagnostics, therapeutics and as a research reagent, e.g.
CC   prophylactically to prevent or delay infection, inflammation or tumour
CC   formation. Sequences given in records ACC40880-ACC40957 represent human
CC   superoxide dismutase 1 antisense inhibitor oligonucleotides
XX
SQ   Sequence 20 BP; 5 A; 6 C; 2 G; 7 T; 0 U; 0 Other;

  Query Match             2.3%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 60;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        212 GAGTTTGGAGATAATACAGC 231
              ||||||||||||||||||||
Db         20 GAGTTTGGAGATAATACAGC 1


RESULT 38
ACC40912/c
ID   ACC40912 standard; DNA; 20 BP.
XX
AC   ACC40912;
XX
DT   23-MAY-2003  (first entry)
XX
DE   Human superoxide dismutase 1 antisense inhibitor # ISIS 150466.
XX
KW   Human; superoxide dismutase 1; antisense; neuroprotective; cytostatic;
KW   antiinflammatory; amyotrophic lateral sclerosis; apoptosis;
KW   hyperproliferative disorder; therapy; infection; inflammation; tumour;
KW   ss.
XX
OS   Homo sapiens.
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   modified_base   1. .20
FT                   /*tag=  a
FT                   /mod_base= OTHER
FT                   /note= "Phosphorothioate linkages. All cytosines are 5-
FT                   methylcytosine"
FT   modified_base   1. .5
FT                   /*tag=  b
FT                   /mod_base= OTHER
FT                   /note= "2'-methoxyethyl (2'-MOE) nucleotides"
FT   modified_base   16. .20
FT                   /*tag=  c
FT                   /mod_base= OTHER
FT                   /note= "2'-methoxyethyl (2'-MOE) nucleotides"
XX
PN   WO2003000707-A2.
XX
PD   03-JAN-2003.
XX
PF   19-JUN-2002; 2002WO-US019664.
XX
PR   21-JUN-2001; 2001US-00888360.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Bennett FC,  Dobie K;
XX
DR   WPI; 2003-184032/18.
XX
PT   Novel antisense compounds targeted to nucleic acids encoding human
PT   superoxide dismutase 1, for modulating expression of the dismutase and
PT   treating diseases or conditions, e.g. amyotrophic lateral sclerosis.
XX
PS   Claim 3; Page 77; 107pp; English.
XX
CC   The invention relates to a compound of 8-50 nucleobases in length,
CC   targeted to a nucleic acid molecule encoding human superoxide dismutase
CC   1. The compound specifically hybridises with and inhibits the expression
CC   of human superoxide dismutase 1 by hybridising with at least an 8-
CC   nucleobase portion of the nucleic acid molecule encoding the active site
CC   of the enzyme. The activity of compounds of the invention may be
CC   described as neuroprotective, cytostatic and antiinflammatory. The
CC   mechanism of action of compounds of the invention is antisense inhibition
CC   of human superoxide dismutase 1 expression by chimeric phosphorothioate
```

```
PS   Claim 2; SEQ ID NO 7; 22pp; Korean.
XX
CC   The invention relates to a novel method and a DNA chip for monitoring a
CC   response of cancer patients to irradiation therapy using antioxidant gene
CC   expression analysis, thereby accurately anticipating the response to
CC   irradiation therapy and minimizing adverse side-effects thereof. A method
CC   for monitoring a response of cancer patients to irradiation therapy
CC   comprises: collecting a peripheral blood cell from a human; irradiating
CC   the peripheral blood cell; extracting RNA according to the time period;
CC   preparing DNA from the RNA; hybridizing the DNA with antioxidant enzyme
CC   cDNA; amplifying the hybridized DNA using one or more pairs of primers
CC   selected from: DNA fragments of ADT66487 and ADT66488; DNA fragments of
CC   ADT66489 and ADT66490; DNA fragments of ADT66491 and ADT66492; DNA
CC   fragments of ADT66493 and ADT66494; DNA fragments of ADT66495 and
CC   ADT66496; and DNA fragments of ADT66497 and ADT66498; and analyzing
CC   expression pattern of the amplified DNA according to the time period. A
CC   DNA chip for monitoring a response of cancer patients to irradiation
CC   therapy amplifies one or more antioxidant genes corresponding to the
CC   following DNA fragments: DNA fragments of ADT66487 and ADT66488 - GPx1;
CC   DNA fragments of ADT66489 and ADT66490 - gamma-GCS; DNA fragments of
CC   ADT66491 and ADT66492 - catalase; DNA fragments of ADT66493 and ADT66494
CC   - CuZn SOD; DNA fragments of ADT66495 and ADT66496 - Mn SOD; and DNA
CC   fragments of ADT66497 and ADT66498 - Prx II. The present sequence
CC   represents a PCR primer of the invention.
XX
SQ   Sequence 21 BP; 4 A; 5 C; 9 G; 3 T; 0 U; 0 Other;

  Query Match             2.4%;  Score 21;  DB 1;  Length 21;
  Best Local Similarity   100.0%;  Pred. No. 52;
  Matches   21;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy         65 ATGGCGACGAAGGCCGTGTGC 85
              |||||||||||||||||||||
Db          1 ATGGCGACGAAGGCCGTGTGC 21


RESULT 35
ABQ73057/c
ID   ABQ73057 standard; DNA; 22 BP.
XX
AC   ABQ73057;
XX
DT   24-SEP-2002  (first entry)
XX
DE   Cu/Zn SOD gene related PCR primer SEQ ID NO:5.
XX
KW   Amyotrophic lateral sclerosis; ALS; transgenic rat; SOD; Cu/Zn SOD;
KW   superoxide dismutase; PCR primer; ss.
XX
OS   Rattus sp.
OS   Synthetic.
XX
PN   JP2002142610-A.
XX
PD   21-MAY-2002.
XX
PF   07-NOV-2000; 2000JP-00339567.
XX
PR   07-NOV-2000; 2000JP-00339567.
XX
PA   (TOHO-) TOHOKU TECHNOARCH KK.
XX
DR   WPI; 2002-552464/59.
XX
PT   An amyotrophic lateral sclerosis model rat for investigation of its
PT   pathology and onset mechanism with introduced exogenic variant Cu/Zn
PT   superoxide dismutase.
XX
PS   Example 2; Page 13; 28pp; Japanese.
XX
CC   The present invention describes an amyotrophic lateral sclerosis (ALS)
CC   model rat. Also described: (1) a transgenic rat or its progeny having a
CC   DNA with integrated exogenic variant Cu/Zn superoxide dismutase (SOD)
CC   gene; and (2) rat embryonic stem cells having human variant Cu/Zn SOD
CC   gene sequence. The transgenic rat can be used in the investigation of the
CC   pathology and the onset mechanism of ALS. The present sequence represents
CC   a PCR primer which is used in an example from the present invention
XX
SQ   Sequence 22 BP; 7 A; 7 C; 4 G; 4 T; 0 U; 0 Other;

  Query Match             2.3%;  Score 20.4;  DB 1;  Length 22;
  Best Local Similarity   95.5%;  Pred. No. 61;
  Matches   21;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        193 GCATGGATTCCATGTTCATGAG 214
              |||||||||| |||||||||
Db         22 GCATGGATTCCGTGTTCATGAG 1


RESULT 36
AAV01383
ID   AAV01383 standard; DNA; 20 BP.
XX
AC   AAV01383;
XX
DT   23-MAR-1998  (first entry)
XX
DE   Superoxide dismutase 1 PCR primer for universal mammalian STS's.
XX
KW   PCR primer; polymerase chain reaction; amplification; UM-STS;
KW   universal mammalian sequence tagged site; genomic map; clone; ss.
XX
OS   Synthetic.
XX
PN   WO9731012-A1.
XX
PD   28-AUG-1997.
XX
PF   18-FEB-1997;   97WO-US002403.
XX
PR   22-FEB-1996;   96US-0012061P.
XX
PA   (UNMI ) UNIV MICHIGAN.
PA   (UNMS ) UNIV MICHIGAN STATE.
XX
PI   Brewer GJ,  Venta PJ,  Yuzbasiyan-Gurkan V;
XX
DR   WPI; 1997-435083/40.
XX
PT   New oligonucleotide primers amplifying gene regions conserved among
PT   mammals - useful for developing genomic maps, isolating clones and making
PT   cross-species comparisons.
XX
PS   Claim 2; Page 13; 26pp; English.
XX
CC   The present sequence represents a specifically claimed oligonucleotide
CC   PCR primer. The oligonucleotide can be used for polymerase chain reaction
CC   (PCR) amplification of DNA, specifically regions of specific genes that
CC   are conserved among mammalian species, i.e. pairs of oligonucleotides
CC   from the present specification represent universal mammalian sequence-
CC   tagged site (UM-STS) primers. The primers are used to develop genomic
CC   maps, to isolate clones from libraries, to make cross-species comparisons
CC   and to develop additional genetic markers. UM-STS allow genomic
CC   comparisons to be made between more species
XX
SQ   Sequence 20 BP; 4 A; 6 C; 5 G; 5 T; 0 U; 0 Other;

  Query Match             2.3%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 60;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        236 TGTACCAGTGCAGGTCCTCA 255
              ||||||||||||||||||||
Db          1 TGTACCAGTGCAGGTCCTCA 20
```

XX
PN US2003186246-A1.
XX
PD 02-OCT-2003.
XX
PF 28-MAR-2002; 2002US-00109349.
XX
PR 28-MAR-2002; 2002US-00109349.
XX
PA (WILL/) WILLEY J C.
PA (CRAW/) CRAWFORD E L.
XX
PI Willey JC, Crawford EL;
XX
DR WPI; 2003-811730/76.
XX
PT Direct comparison of numerical gene expression values between samples of
PT genes comprises using multiplex standardized reverse transcription-
PT polymerase chain reaction.
XX
PS Example 1; SEQ ID NO 52; 59pp; English.
XX
CC The present invention relates to a method for the direct comparison of
CC numerical gene expression values between samples of genes. The method
CC comprises amplifying cDNA in the presence of a competitive template
CC mixture and primer pairs for several genes and then amplifying aliquots
CC of the PCR products using a primer pair specific for each gene. The
CC method of amplification is by multiplex standardised reverse
CC transcriptase-polymerase chain reaction (StaRT-PCR). High density
CC oligonucleotide or cDNA arrays are used to measure PCR products following
CC quantitative StaRT-PCR. The method is useful for the assessment of gene
CC expression in small biological samples such as fine needle aspirate
CC biopsies, and laser captured microdissected materials. The method allows
CC for the standardised measurement of hundreds of genes from the same
CC sample, which in prior art, could only be assessed for one gene. The
CC present sequence represents a multiplex StaRT-PCR primer which can be
CC used in the method of the present invention.
XX
SQ Sequence 21 BP; 6 A; 1 C; 9 G; 5 T; 0 U; 0 Other;

Query Match 2.4%; Score 21; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 52;
Matches 21; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 153 TGAAGGTGTGGGGAAGCATTA 173
||||||||||||||||||||
Db 1 TGAAGGTGTGGGGAAGCATTA 21

RESULT 33
ADD56533/c
ID ADD56533 standard; DNA; 21 BP.
XX
AC ADD56533;
XX
DT 15-JAN-2004 (first entry)
XX
DE Human gene expression analysis multiplex StaRT-PCR primer #53.
XX
KW Gene expression; multiplex standardised reverse transcriptase-PCR;
KW StaRT-PCR; high density oligonucleotide array; cDNA array;
KW small biological sample; fine needle aspirate biopsy;
KW laser captured microdissected material; human; primer; ss.
XX
OS Homo sapiens.
XX
PN US2003186246-A1.
XX
PD 02-OCT-2003.
XX
PF 28-MAR-2002; 2002US-00109349.
XX
PR 28-MAR-2002; 2002US-00109349.
XX
PA (WILL/) WILLEY J C.
PA (CRAW/) CRAWFORD E L.
XX
PI Willey JC, Crawford EL;
XX
DR WPI; 2003-811730/76.
XX
PT Direct comparison of numerical gene expression values between samples of
PT genes comprises using multiplex standardized reverse transcription-
PT polymerase chain reaction.
XX
PS Example 1; SEQ ID NO 53; 59pp; English.
XX
CC The present invention relates to a method for the direct comparison of
CC numerical gene expression values between samples of genes. The method
CC comprises amplifying cDNA in the presence of a competitive template
CC mixture and primer pairs for several genes and then amplifying aliquots
CC of the PCR products using a primer pair specific for each gene. The
CC method of amplification is by multiplex standardised reverse
CC transcriptase-polymerase chain reaction (StaRT-PCR). High density
CC oligonucleotide or cDNA arrays are used to measure PCR products following
CC quantitative StaRT-PCR. The method is useful for the assessment of gene
CC expression in small biological samples such as fine needle aspirate
CC biopsies, and laser captured microdissected materials. The method allows
CC for the standardised measurement of hundreds of genes from the same
CC sample, which in prior art, could only be assessed for one gene. The
CC present sequence represents a multiplex StaRT-PCR primer which can be
CC used in the method of the present invention.
XX
SQ Sequence 21 BP; 9 A; 8 C; 2 G; 2 T; 0 U; 0 Other;

Query Match 2.4%; Score 21; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 52;
Matches 21; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 492 GTCGTTTGGCTTGTGGTGTAA 512
||||||||||||||||||||
Db 21 GTCGTTTGGCTTGTGGTGTAA 1

RESULT 34
ADT66493
ID ADT66493 standard; DNA; 21 BP.
XX
AC ADT66493;
XX
DT 16-DEC-2004 (first entry)
XX
DE PCR primer for CuZn SOD SEQ ID NO:7.
XX
KW ss; primer; PCR; CuZn SOD; cancer; antioxidant gene expression analysis;
KW irradiation therapy.
XX
OS Synthetic.
XX
PN KR2004025183-A.
XX
PD 24-MAR-2004.
XX
PF 18-SEP-2002; 2002KR-00057027.
XX
PR 18-SEP-2002; 2002KR-00057027.
XX
PA (PARK/) PARK Y M.
XX
PI Choi EM, Han MY, Hwang SY, Jun HJ, Kim YH, Park JH, Park YM;
XX
DR WPI; 2004-495260/47.
XX
PT Method and DNA chip for monitoring response of cancer patients to
PT irradiation therapy using antioxidant gene expression analysis.
XX

```
  Query Match             2.5%;  Score 22;  DB 1;  Length 27;
  Best Local Similarity   100.0%;  Pred. No. 56;
  Matches   22;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy         67 GGCGACGAAGGCCGTGTGCGTG 88
              ||||||||||||||||||||||
Db          6 GGCGACGAAGGCCGTGTGCGTG 27


RESULT 30
ABQ73054/c
ID   ABQ73054 standard; DNA; 21 BP.
XX
AC   ABQ73054;
XX
DT   24-SEP-2002  (first entry)
XX
DE   Cu/Zn SOD gene related PCR primer SEQ ID NO:2.
XX
KW   Amyotrophic lateral sclerosis; ALS; transgenic rat; SOD; Cu/Zn SOD;
KW   superoxide dismutase; PCR primer; ss.
XX
OS   Rattus sp.
OS   Synthetic.
XX
PN   JP2002142610-A.
XX
PD   21-MAY-2002.
XX
PF   07-NOV-2000; 2000JP-00339567.
XX
PR   07-NOV-2000; 2000JP-00339567.
XX
PA   (TOHO-) TOHOKU TECHNOARCH KK.
XX
DR   WPI; 2002-552464/59.
XX
PT   An amyotrophic lateral sclerosis model rat for investigation of its
PT   pathology and onset mechanism with introduced exogenic variant Cu/Zn
PT   superoxide dismutase.
XX
PS   Example 1; Page 13; 28pp; Japanese.
XX
CC   The present invention describes an amyotrophic lateral sclerosis (ALS)
CC   model rat. Also described: (1) a transgenic rat or its progeny having a
CC   DNA with integrated exogenic variant Cu/Zn superoxide dismutase (SOD)
CC   gene; and (2) rat embryonic stem cells having human variant Cu/Zn SOD
CC   gene sequence. The transgenic rat can be used in the investigation of the
CC   pathology and the onset mechanism of ALS. The present sequence represents
CC   a PCR primer which is used in an example from the present invention
XX
SQ   Sequence 21 BP; 9 A; 3 C; 6 G; 3 T; 0 U; 0 Other;

  Query Match             2.4%;  Score 21;  DB 1;  Length 21;
  Best Local Similarity   100.0%;  Pred. No. 52;
  Matches   21;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        564 TCATCTGTTATCCTGCTAGCT 584
              |||||||||||||||||||||
Db         21 TCATCTGTTATCCTGCTAGCT 1


RESULT 31
ABZ79578
ID   ABZ79578 standard; DNA; 21 BP.
XX
AC   ABZ79578;
XX
DT   23-MAY-2003  (first entry)
XX
DE   Human superoxide dismutase 1 PCR probe sequence.
XX
KW   Human; superoxide dismutase 1; antisense; neuroprotective; cytostatic;
KW   antiinflammatory; amyotrophic lateral sclerosis; apoptosis;
KW   hyperproliferative disorder; therapy; infection; inflammation; tumour;
KW   PCR; probe; ss.
XX
OS   Homo sapiens.
XX
PN   WO2003000707-A2.
XX
PD   03-JAN-2003.
XX
PF   19-JUN-2002; 2002WO-US019664.
XX
PR   21-JUN-2001; 2001US-00888360.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Bennett FC,  Dobie K;
XX
DR   WPI; 2003-184032/18.
XX
PT   Novel antisense compounds targeted to nucleic acids encoding human
PT   superoxide dismutase 1, for modulating expression of the dismutase and
PT   treating diseases or conditions, e.g. amyotrophic lateral sclerosis.
XX
PS   Example 13; Page 74; 107pp; English.
XX
CC   The invention relates to a compound of 8-50 nucleobases in length,
CC   targeted to a nucleic acid molecule encoding human superoxide dismutase
CC   1. The compound specifically hybridises with and inhibits the expression
CC   of human superoxide dismutase 1 by hybridising with at least an 8-
CC   nucleobase portion of the nucleic acid molecule encoding the active site
CC   of the enzyme. The activity of compounds of the invention may be
CC   described as neuroprotective, cytostatic and antiinflammatory. The
CC   mechanism of action of compounds of the invention is antisense inhibition
CC   of human superoxide dismutase 1 expression by chimeric phosphorothioate
CC   oligonucleotides having 2'-methoxyethyl (2'-MOE) wings and a deoxy gap.
CC   Compounds of the invention are useful for inhibiting the expression of
CC   human superoxide dismutase 1 in human cells or tissues, and for treating
CC   a disease or condition associated with this enzyme (antisense therapy),
CC   especially amyotrophic lateral sclerosis, a disease or condition arising
CC   from aberrant apoptosis and a hyperproliferative disorder. It may also be
CC   used in diagnostics, therapeutics and as a research reagent, e.g.
CC   prophylactically to prevent or delay infection, inflammation or tumour
CC   formation. The current sequence represents the human superoxide dismutase
CC   1 PCR probe sequence
XX
SQ   Sequence 21 BP; 3 A; 5 C; 9 G; 4 T; 0 U; 0 Other;

  Query Match             2.4%;  Score 21;  DB 1;  Length 21;
  Best Local Similarity   100.0%;  Pred. No. 52;
  Matches   21;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy         71 ACGAAGGCCGTGTGCGTGCTG 91
              |||||||||||||||||||||
Db          1 ACGAAGGCCGTGTGCGTGCTG 21


RESULT 32
ADD56532
ID   ADD56532 standard; DNA; 21 BP.
XX
AC   ADD56532;
XX
DT   15-JAN-2004  (first entry)
XX
DE   Human gene expression analysis multiplex StaRT-PCR primer #52.
XX
KW   Gene expression; multiplex standardised reverse transcriptase-PCR;
KW   StaRT-PCR; high density oligonucleotide array; cDNA array;
KW   small biological sample; fine needle aspirate biopsy;
KW   laser captured microdissected material; human; primer; ss.
XX
OS   Homo sapiens.
```

CC The invention relates to a cell-transducing HIV-1 Tat-superoxide
CC dismutase fusion protein containing HIV-1 Tat residues 49-57 linked at
CC the amino terminal of Cu/Zn-superoxide dismutase (Cu/Zn-SOD), or its
CC derivative, to form a covalent bond. The invention also relates to a
CC recombinant polynucleotide that encodes the Tat-superoxide dismutase
CC fusion protein, in which the DNA encoding HIV-1 Tat residues 49-57 is
CC linked at the 5'-terminal of Cu/Zn-superoxide dismutase cDNA or its
CC derivative and a method of introducing the Tat-superoxide dismutase
CC fusion protein into a cell, by expressing the expression vector in a
CC microorganism, purifying the expressed Tat-superoxide dismutase fusion
CC protein and adding the fusion protein to the cell. The sequences and
CC methods are used for countering reactive oxygen species that cause damage
CC to macromolecules in the human body. This sequence represents a PCR
CC primer used to amplify DNA encoding the human Cu/Zn-SOD protein of the
CC invention.
XX
SQ Sequence 27 BP; 4 A; 7 C; 12 G; 4 T; 0 U; 0 Other;

Query Match 2.5%; Score 22; DB 1; Length 27;
Best Local Similarity 100.0%; Pred. No. 56;
Matches 22; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 67 GGCGACGAAGGCCGTGTGCGTG 88
||||||||||||||||||||||
Db 6 GGCGACGAAGGCCGTGTGCGTG 27

RESULT 28
ADO06572
ID ADO06572 standard; DNA; 27 BP.
XX
AC ADO06572;
XX
DT 29-JUL-2004 (first entry)
XX
DE Fusion protein related human coding sequence PCR primer #1.
XX
KW fusion protein; transduction domain; superoxide dismutase; aging;
KW inflammatory disease; PCR; ss; primer.
XX
OS Homo sapiens.
XX
PN WO2004039846-A1.
XX
PD 13-MAY-2004.
XX
PF 13-MAR-2003; 2003WO-KR000490.
XX
PR 31-OCT-2002; 2002KR-00066981.
XX
PA (UYHA-) UNIV HALLYM.
XX
PI Choi S, Park J, Han K, Choi J;
XX
DR WPI; 2004-376167/35.
XX
PT New transduction domain-target protein-transduction domain fusion protein
PT having the ability to be transduced into a cell, useful for delivering a
PT functional protein (i.e. superoxide dismutase) into a cell at enhanced
PT efficiency.
XX
PS Disclosure; Page 38; 47pp; English.
XX
CC The present invention relates to a transduction domain-target protein-
CC transduction domain fusion protein having the ability to be transduced
CC into a cell, where the transduction domain is covalently bonded to each
CC of the amino- and carboxyl-terminal ends of the target protein. The
CC fusion protein is useful for delivering a functional protein or peptide
CC (i.e. superoxide dismutase) into a cell at enhanced efficiency. The
CC composition may be used in protein therapy where the superoxide dismutase
CC playing a main role in removing reactive oxygen species is delivered into
CC cells to treat diseases. It may be used in cosmetic and health food
CC industries, in addition to treating various diseases, such as aging or
CC inflammatory diseases. The present sequence is a PCR primer used in the
CC exemplification of the invention.
XX
SQ Sequence 27 BP; 4 A; 7 C; 12 G; 4 T; 0 U; 0 Other;

Query Match 2.5%; Score 22; DB 1; Length 27;
Best Local Similarity 100.0%; Pred. No. 56;
Matches 22; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 67 GGCGACGAAGGCCGTGTGCGTG 88
||||||||||||||||||||||
Db 6 GGCGACGAAGGCCGTGTGCGTG 27

RESULT 29
ADQ74974
ID ADQ74974 standard; DNA; 27 BP.
XX
AC ADQ74974;
XX
DT 09-SEP-2004 (first entry)
XX
DE Tat-pyridoxal kinase fusion protein associated primer seqid 3.
XX
KW cell-transduction; Tat-pyridoxal kinase fusion protein; HIV-1; Tat;
KW pyridoxal kinase; PK; growth delay; alopecia; anaemia; seizure;
KW convulsion; Epilepsy; Parkinsonism; Huntington's disease; Depression;
KW PCR; primer; ss.
XX
OS Homo sapiens.
XX
PN KR2003090457-A.
XX
PD 28-NOV-2003.
XX
PF 24-MAY-2002; 2002KR-00028940.
XX
PR 24-MAY-2002; 2002KR-00028940.
XX
PA (BAEK/) BAEK N I.
PA (CHOS/) CHO S W.
PA (CHOI/) CHOI S Y.
PA (KANG/) KANG J H.
PA (KWON/) KWON O S.
PA (LEEK/) LEE K S.
PA (PARK/) PARK J S.
XX
PI Baek NI, Ban JH, Cho SW, Choi SY, Kang JH, Kim AY, Kim CG;
PI Kim DW, Kim JA, Kwon OS, Lee KS, Lee YJ, Park JS, Yoon CS;
XX
DR WPI; 2004-255654/24.
XX
PT Cell-transducing hiv-1 tat-pyridoxal kinase fusion protein and the use
PT thereof.
XX
PS Example 1; SEQ ID NO 3; 19pp; Korean.
XX
CC The invention describes a cell-transducing HIV-1 Tat-pyridoxal kinase
CC fusion protein, wherein HIV-1 Tat 49-57 residues are covalently bound to
CC the amino terminal of the pyridoxal kinase. The protein is useful for
CC cell-transducing pyridoxal kinase (PK) for protein therapy. A recombinant
CC polynucleotide encoding the cell-transducing HIV-1 Tat-pyridoxal kinase
CC fusion protein has the nucleotide sequence of SEQ ID NO: 6. An expression
CC vector for expressing the cell-transducing HIV-1 Tat-pyridoxal kinase
CC fusion protein contains the recombinant polynucleotide of SEQ ID NO: 6.
CC The cell-transducing HIV-1 Tat-pyridoxal kinase fusion protein is useful
CC for treatment of growth delay, alopecia, anaemia, seizures, convulsions,
CC Epilepsy, Parkinsonism, Huntington's disease and Depression. This
CC sequence represents a primer used in the creation of the HIV-1 Tat-
CC pyridoxal kinase fusion protein of the invention.
XX
SQ Sequence 27 BP; 4 A; 7 C; 12 G; 4 T; 0 U; 0 Other;

XX
PS Example; Page 53; 80pp; English.
XX
CC The present sequence is that of a forward PCR primer from exon 3 of the
CC human superoxide dismutase (SOD1) gene. Use with a reverse primer
CC ADG73926 from exon 4 produces a 99 bp amplicon from cDNA, corresponding
CC to a 838 bp sequence of genomic DNA. The primers were used in a SYBR
CC Green I real-time quantitative (Q)-PCR analysis of SOD1 in order to
CC validate differential expression of the gene in cells and tissues of
CC multiple sclerosis (MS) sufferers compared to cells and tissues of non-
CC sufferers. Q-PCR indicated 2.0-fold up-regulation of SOD1 in chronic
CC active MS tissue and 14.0-fold up-regulation in acute plaque MS tissue.
CC The invention provides a method for determining whether an individual is
CC predisposed to MS. This comprises determining an amount of one or more MS
CC -associated nucleic acids (e.g. SOD1) or proteins in one or more cells or
CC tissues obtained from the individual, where if the amount is different to
CC a reference amount, the individual is predisposed to MS. The amount of MS
CC -associated nucleic acid is determined by nucleic acid array analysis or
CC quantitative nucleic acid sequence amplification. The MS-associated
CC nucleic acids may carry mutations or other sequence variations that
CC affect gene expression and contribute to MS pathophysiology. They may be
CC of diagnostic value in predicting a predisposition to MS, confirming
CC clinical diagnosis of MS and in the identification of compounds useful
CC for treating MS.
XX
SQ Sequence 22 BP; 4 A; 7 C; 2 G; 9 T; 0 U; 0 Other;

Query Match 2.5%; Score 22; DB 1; Length 22;
Best Local Similarity 100.0%; Pred. No. 44;
Matches 22; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 248 GGTCCTCACTTTAATCCTCTAT 269
||||||||||||||||||||||
Db 1 GGTCCTCACTTTAATCCTCTAT 22

RESULT 26
ADG73926/c
ID ADG73926 standard; DNA; 22 BP.
XX
AC ADG73926;
XX
DT 11-MAR-2004 (first entry)
XX
DE Human superoxide dismutase reverse PCR primer.
XX
KW Multiple sclerosis; human; diagnosis; superoxide dismutase; PCR; primer;
KW ss; enzyme.
XX
OS Homo sapiens.
XX
PN WO2003102227-A1.
XX
PD 11-DEC-2003.
XX
PF 02-JUN-2003; 2003WO-AU000684.
XX
PR 31-MAY-2002; 2002AU-00002719.
XX
PA (UYGR-) UNIV GRIFFITH.
XX
PI Griffiths LR, Tajouri L;
XX
DR WPI; 2004-081938/08.
XX
PT Determining whether an individual is predisposed to multiple sclerosis
PT (MS), for treating MS, by determining an amount of one or more MS-
PT associated nucleic acids or proteins in one or more cells or tissues
PT obtained from the individual.
XX
PS Example; Page 53; 80pp; English.
XX
CC The present sequence is that of a reverse PCR primer from exon 4 of the
CC human superoxide dismutase (SOD1) gene. Use with a forward primer
CC ADG73925 from exon 3 produces a 99 bp amplicon from cDNA, corresponding
CC to a 838 bp sequence of genomic DNA. The primers were used in a SYBR
CC Green I real-time quantitative (Q)-PCR analysis of SOD1 in order to
CC validate differential expression of the gene in cells and tissues of
CC multiple sclerosis (MS) sufferers compared to cells and tissues of non-
CC sufferers. Q-PCR indicated 2.0-fold up-regulation of SOD1 in chronic
CC active MS tissue and 14.0-fold up-regulation in acute plaque MS tissue.
CC The invention provides a method for determining whether an individual is
CC predisposed to MS. This comprises determining an amount of one or more MS
CC -associated nucleic acids (e.g. SOD1) or proteins in one or more cells or
CC tissues obtained from the individual, where if the amount is different to
CC a reference amount, the individual is predisposed to MS. The amount of MS
CC -associated nucleic acid is determined by nucleic acid array analysis or
CC quantitative nucleic acid sequence amplification. The MS-associated
CC nucleic acids may carry mutations or other sequence variations that
CC affect gene expression and contribute to MS pathophysiology. They may be
CC of diagnostic value in predicting a predisposition to MS, confirming
CC clinical diagnosis of MS and in the identification of compounds useful
CC for treating MS.
XX
SQ Sequence 22 BP; 5 A; 6 C; 3 G; 8 T; 0 U; 0 Other;

Query Match 2.5%; Score 22; DB 1; Length 22;
Best Local Similarity 100.0%; Pred. No. 44;
Matches 22; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 323 AATGTGACTGCTGACAAAGATG 344
||||||||||||||||||||||
Db 22 AATGTGACTGCTGACAAAGATG 1

RESULT 27
ADO59160
ID ADO59160 standard; DNA; 27 BP.
XX
AC ADO59160;
XX
DT 15-JUL-2004 (first entry)
XX
DE Human Cu/Zn-superoxide dismutase (Cu/Zn-SOD) DNA PCR primer #1.
XX
KW Human; Tat; superoxide dismutase; Tat-superoxide dismutase; PCR; ss;
KW Cu/Zn-superoxide dismutase; Cu/Zn-SOD; reactive oxygen species; primer.
XX
OS Homo sapiens.
XX
PN KR2002010445-A.
XX
PD 04-FEB-2002.
XX
PF 03-MAR-2001; 2001KR-00010980.
XX
PR 26-JUL-2000; 2000KR-00043039.
PR 02-FEB-2001; 2001KR-00005094.
XX
PA (CHOI/) CHOI S Y.
PA (KANG/) KANG J H.
PA (KWAN/) KWAN H I.
PA (PARK/) PARK J S.
XX
PI Choi SY, Eum WS, Jang HU, Kang JH, Kang TC, Kwan HI, Lee BR;
PI Park JS, Ryu JY, Won MH;
XX
DR WPI; 2003-436529/41.
XX
PT Cell-transducing HIV-1 Tat-superoxide dismutase fusion protein, for
PT countering reactive oxygen species, contains HIV-1 Tat 49-57 residues
PT linked at amino terminal of Cu, Zn-superoxide dismutase to form covalent
PT bond.
XX
PS Example 1; SEQ ID NO 3; 22pp; Korean.
XX

PN WO2004039846-A1.
XX
PD 13-MAY-2004.
XX
PF 13-MAR-2003; 2003WO-KR000490.
XX
PR 31-OCT-2002; 2002KR-00066981.
XX
PA (UYHA-) UNIV HALLYM.
XX
PI Choi S, Park J, Han K, Choi J;
XX
DR WPI; 2004-376167/35.
XX
PT New transduction domain-target protein-transduction domain fusion protein
PT having the ability to be transduced into a cell, useful for delivering a
PT functional protein (i.e. superoxide dismutase) into a cell at enhanced
PT efficiency.
XX
PS Disclosure; Page 38; 47pp; English.
XX
CC The present invention relates to a transduction domain-target protein-
CC transduction domain fusion protein having the ability to be transduced
CC into a cell, where the transduction domain is covalently bonded to each
CC of the amino- and carboxyl-terminal ends of the target protein. The
CC fusion protein is useful for delivering a functional protein or peptide
CC (i.e. superoxide dismutase) into a cell at enhanced efficiency. The
CC composition may be used in protein therapy where the superoxide dismutase
CC playing a main role in removing reactive oxygen species is delivered into
CC cells to treat diseases. It may be used in cosmetic and health food
CC industries, in addition to treating various diseases, such as aging or
CC inflammatory diseases. The present sequence is a PCR primer used in the
CC exemplification of the invention.
XX
SQ Sequence 27 BP; 6 A; 7 C; 6 G; 8 T; 0 U; 0 Other;

Query Match 2.5%; Score 22.2; DB 1; Length 27;
Best Local Similarity 88.9%; Pred. No. 53;
Matches 24; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 509 GTAATTGGGATCGCCCAATAAACATTC 535
||||||||||||||||||||| || |
Db 27 GTAATTGGGATCGCCCAATAAGGATCC 1

RESULT 24
ADQ74975/c
ID ADQ74975 standard; DNA; 27 BP.
XX
AC ADQ74975;
XX
DT 09-SEP-2004 (first entry)
XX
DE Tat-pyridoxal kinase fusion protein associated primer seqid 4.
XX
KW cell-transduction; Tat-pyridoxal kinase fusion protein; HIV-1; Tat;
KW pyridoxal kinase; PK; growth delay; alopecia; anaemia; seizure;
KW convulsion; Epilepsy; Parkinsonism; Huntington's disease; Depression;
KW PCR; primer; ss.
XX
OS Homo sapiens.
XX
PN KR2003090457-A.
XX
PD 28-NOV-2003.
XX
PF 24-MAY-2002; 2002KR-00028940.
XX
PR 24-MAY-2002; 2002KR-00028940.
XX
PA (BAEK/) BAEK N I.
PA (CHOS/) CHO S W.
PA (CHOI/) CHOI S Y.
PA (KANG/) KANG J H.
PA (KWON/) KWON O S.
PA (LEEK/) LEE K S.
PA (PARK/) PARK J S.
XX
PI Baek NI, Ban JH, Cho SW, Choi SY, Kang JH, Kim AY, Kim CG;
PI Kim DW, Kim JA, Kwon OS, Lee KS, Lee YJ, Park JS, Yoon CS;
XX
DR WPI; 2004-255654/24.
XX
PT Cell-transducing hiv-1 tat-pyridoxal kinase fusion protein and the use
PT thereof.
XX
PS Example 1; SEQ ID NO 4; 19pp; Korean.
XX
CC The invention describes a cell-transducing HIV-1 Tat-pyridoxal kinase
CC fusion protein, wherein HIV-1 Tat 49-57 residues are covalently bound to
CC the amino terminal of the pyridoxal kinase. The protein is useful for
CC cell-transducing pyridoxal kinase (PK) for protein therapy. A recombinant
CC polynucleotide encoding the cell-transducing HIV-1 Tat-pyridoxal kinase
CC fusion protein has the nucleotide sequence of SEQ ID NO: 6. An expression
CC vector for expressing the cell-transducing HIV-1 Tat-pyridoxal kinase
CC fusion protein contains the recombinant polynucleotide of SEQ ID NO: 6.
CC The cell-transducing HIV-1 Tat-pyridoxal kinase fusion protein is useful
CC for treatment of growth delay, alopecia, anaemia, seizures, convulsions,
CC Epilepsy, Parkinsonism, Huntington's disease and Depression. This
CC sequence represents a primer used in the creation of the HIV-1 Tat-
CC pyridoxal kinase fusion protein of the invention.
XX
SQ Sequence 27 BP; 6 A; 7 C; 6 G; 8 T; 0 U; 0 Other;

Query Match 2.5%; Score 22.2; DB 1; Length 27;
Best Local Similarity 88.9%; Pred. No. 53;
Matches 24; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 509 GTAATTGGGATCGCCCAATAAACATTC 535
||||||||||||||||||||| || |
Db 27 GTAATTGGGATCGCCCAATAAGGATCC 1

RESULT 25
ADG73925
ID ADG73925 standard; DNA; 22 BP.
XX
AC ADG73925;
XX
DT 11-MAR-2004 (first entry)
XX
DE Human superoxide dismutase forward PCR primer.
XX
KW Multiple sclerosis; human; diagnosis; superoxide dismutase; PCR; primer;
KW ss; enzyme.
XX
OS Homo sapiens.
XX
PN WO2003102227-A1.
XX
PD 11-DEC-2003.
XX
PF 02-JUN-2003; 2003WO-AU000684.
XX
PR 31-MAY-2002; 2002AU-00002719.
XX
PA (UYGR-) UNIV GRIFFITH.
XX
PI Griffiths LR, Tajouri L;
XX
DR WPI; 2004-081938/08.
XX
PT Determining whether an individual is predisposed to multiple sclerosis
PT (MS), for treating MS, by determining an amount of one or more MS-
PT associated nucleic acids or proteins in one or more cells or tissues
PT obtained from the individual.

OS Homo sapiens.
XX
PN WO200210219-A1.
XX
PD 07-FEB-2002.
XX
PF 21-MAY-2001; 2001WO-KR000835.
XX
PR 26-JUL-2000; 2000KR-00043022.
PR 08-FEB-2001; 2001KR-00006178.
PR 03-MAR-2001; 2001KR-00010981.
PR 19-MAR-2001; 2001KR-00014147.
XX
PA (CHOS/) CHO S.
PA (CHOI/) CHOI S.
PA (PARK/) PARK J.
PA (KWON/) KWON H.
PA (KANG/) KANG J.
PA (KANG/) KANG T.
PA (WONM/) WON M.
PA (HANK/) HAN K.
PA (LEEK/) LEE K.
XX
PI Choi S, Park J, Kwon H, Kang J, Kang T, Won M, Han K, Lee K;
XX
DR WPI; 2002-188723/24.
XX
PT Novel oligolysine transport domain, useful for introducing oligolysine-
PT cargo molecule complex into a cell or cell nucleus, is covalently bound
PT to a cargo molecule that is not penetrating into cell or cell nucleus.
XX
PS Example 10; Page 27; 70pp; English.
XX
CC The invention relates to oligolysine transport domain, an oligolysine
CC vector and an oligolysine-cargo molecule complex each of which being
CC comprised of a plurality of lysine residues. The oligolysine transducing
CC domain-binding fusion protein is efficiently transducible into cytoplasm
CC and biologically active. An expression vector comprising a cargo molecule
CC cDNA is useful for introducing oligolysine-cargo molecule complex into a
CC cell or cell nucleus. Cargo molecule or expression vector comprising a
CC cargo molecule cDNA is useful for preventing and treating SOD related
CC diseases e.g. glomerulonephritis, autoimmune disease, angiitis, apoplexy,
CC myocardial infarction, dysrhythmia, angina pectoris, idiopathic
CC haemochromatosis, disease occurred from radiation treatment, progeria,
CC disease-related aging, sickle-cell anaemia, malaria, pulmonary emphysema,
CC myocardiopathy, autoimmune nephrotic syndrome, Alzheimer's disease,
CC Betelnut-related oral caner, Parkinson's disease, hyperbaric oxygen
CC disease and cataract. The fusion DNA of the invention is used in gene
CC therapy. The present sequence is a PCR primer used to amplify human Zn-
CC SOD DNA. This primer is used to prepare vector expressing Lys-SOD fusion
CC protein
XX
SQ Sequence 27 BP; 6 A; 7 C; 6 G; 8 T; 0 U; 0 Other;

Query Match 2.5%; Score 22.2; DB 1; Length 27;
Best Local Similarity 88.9%; Pred. No. 53;
Matches 24; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 509 GTAATTGGGATCGCCCAATAAACATTC 535
||||||||||||||||||||| || |
Db 27 GTAATTGGGATCGCCCAATAAGGATCC 1

RESULT 22
ADO59161/c
ID ADO59161 standard; DNA; 27 BP.
XX
AC ADO59161;
XX
DT 15-JUL-2004 (first entry)
XX
DE Human Cu/Zn-superoxide dismutase (Cu/Zn-SOD) DNA PCR primer #2.
XX
KW Human; Tat; superoxide dismutase; Tat-superoxide dismutase; PCR; ss;
KW Cu/Zn-superoxide dismutase; Cu/Zn-SOD; reactive oxygen species; primer.
XX
OS Homo sapiens.
XX
PN KR2002010445-A.
XX
PD 04-FEB-2002.
XX
PF 03-MAR-2001; 2001KR-00010980.
XX
PR 26-JUL-2000; 2000KR-00043039.
PR 02-FEB-2001; 2001KR-00005094.
XX
PA (CHOI/) CHOI S Y.
PA (KANG/) KANG J H.
PA (KWAN/) KWAN H I.
PA (PARK/) PARK J S.
XX
PI Choi SY, Eum WS, Jang HU, Kang JH, Kang TC, Kwan HI, Lee BR;
PI Park JS, Ryu JY, Won MH;
XX
DR WPI; 2003-436529/41.
XX
PT Cell-transducing HIV-1 Tat-superoxide dismutase fusion protein, for
PT countering reactive oxygen species, contains HIV-1 Tat 49-57 residues
PT linked at amino terminal of Cu, Zn-superoxide dismutase to form covalent
PT bond.
XX
PS Example 1; SEQ ID NO 4; 22pp; Korean.
XX
CC The invention relates to a cell-transducing HIV-1 Tat-superoxide
CC dismutase fusion protein containing HIV-1 Tat residues 49-57 linked at
CC the amino terminal of Cu/Zn-superoxide dismutase (Cu/Zn-SOD), or its
CC derivative, to form a covalent bond. The invention also relates to a
CC recombinant polynucleotide that encodes the Tat-superoxide dismutase
CC fusion protein, in which the DNA encoding HIV-1 Tat residues 49-57 is
CC linked at the 5'-terminal of Cu/Zn-superoxide dismutase cDNA or its
CC derivative and a method of introducing the Tat-superoxide dismutase
CC fusion protein into a cell, by expressing the expression vector in a
CC microorganism, purifying the expressed Tat-superoxide dismutase fusion
CC protein and adding the fusion protein to the cell. The sequences and
CC methods are used for countering reactive oxygen species that cause damage
CC to macromolecules in the human body. This sequence represents a PCR
CC primer used to amplify DNA encoding the human Cu/Zn-SOD protein of the
CC invention.
XX
SQ Sequence 27 BP; 6 A; 7 C; 6 G; 8 T; 0 U; 0 Other;

Query Match 2.5%; Score 22.2; DB 1; Length 27;
Best Local Similarity 88.9%; Pred. No. 53;
Matches 24; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 509 GTAATTGGGATCGCCCAATAAACATTC 535
||||||||||||||||||||| || |
Db 27 GTAATTGGGATCGCCCAATAAGGATCC 1

RESULT 23
ADO06573/c
ID ADO06573 standard; DNA; 27 BP.
XX
AC ADO06573;
XX
DT 29-JUL-2004 (first entry)
XX
DE Fusion protein related human coding sequence PCR primer #2.
XX
KW fusion protein; transduction domain; superoxide dismutase; aging;
KW inflammatory disease; PCR; ss; primer.
XX
OS Homo sapiens.
XX

XX
PN WO2003016527-A2.
XX
PD 27-FEB-2003.
XX
PF 13-AUG-2002; 2002WO-EP009079.
XX
PR 14-AUG-2001; 2001BE-00000545.
XX
PA (PROB-) PROBIOX SA.
XX
PI Pincemail J, Piette J, Marechal D;
XX
DR WPI; 2003-268334/26.
XX
PT Determining oxidative stress markers in a group of individuals by
PT comparing the amount of each of the oxidative stress markers obtained
PT from each of the group of individuals with that of the group of healthy
PT individuals.
XX
PS Disclosure; Page 34; 67pp; English.
XX
CC The invention relates to a method for determining oxidative stress
CC markers in a group of individuals. The method comprises determining the
CC risk factor for oxidative stress in the group, measuring the amount of at
CC least 10 different oxidative stress markers in a sample obtained from
CC each of the group of individuals, and comparing the amount of each of the
CC oxidative stress markers with the amount of each of the oxidative stress
CC markers measured in a group of healthy individuals to determine whether
CC the oxidative stress markers are increased or decreased in the group of
CC individuals carrying a risk factor for oxidative stress relative to
CC healthy individuals. This sequence represents a PCR primer used to detect
CC oxidative stress
XX
SQ Sequence 23 BP; 8 A; 4 C; 6 G; 5 T; 0 U; 0 Other;

Query Match 2.6%; Score 23; DB 1; Length 23;
Best Local Similarity 100.0%; Pred. No. 38;
Matches 23; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 321 GCAATGTGACTGCTGACAAAGAT 343
||||||||||||||||||||||||
Db 1 GCAATGTGACTGCTGACAAAGAT 23

RESULT 20
AAD13501
ID AAD13501 standard; DNA; 25 BP.
XX
AC AAD13501;
XX
DT 06-NOV-2001 (first entry)
XX
DE Rat superoxide dismutase (SOD) probe sense strand.
XX
KW Antioxidative enzyme; catalase; CAT; superoxide dismutase; SOD; therapy;
KW reactive oxygen species; ROS; free radical; dietary supplement; stroke;
KW AP-1 transcription factor; renal reperfusion damage; cerebral ischaemia;
KW myocardial infarction; heart attack; pain; atherosclerosis; neuroleptic;
KW trauma; premature aging; neurodegenerative disease; Tardive dyskinesia;
KW Parkinson's disease; amyotrophic lateral sclerosis; Alzheimer's disease;
KW arthritis; inflammatory disease; diabetes; ulcerative colitis; cataract;
KW senility; Down's syndrome; macular degeneration; septic shock; epilepsy;
KW polytraumatous shock; schizophrenia; antiulcer; clozapine; tranquilliser;
KW cardiant; cerebroprotective; vulnerary; nootropic; Huntington's disease;
KW anticonvulsant; neuroprotective; antiarthritic; antiinflammatory; burn;
KW cytostatic; leukaemia; ophthalmological; antibacterial;
KW immunosuppressive; probe; ss.
XX
OS Rattus sp.
XX
PN WO200136454-A1.
XX
PD 25-MAY-2001.
XX
PF 17-NOV-2000; 2000WO-US031764.
XX
PR 18-NOV-1999; 99US-0166381P.
XX
PA (CERE-) CEREMEDIX INC.
XX
PI Shashoua VE;
XX
DR WPI; 2001-496512/54.
XX
PT Novel peptide compound that up regulates expression of a gene encoding
PT antioxidative enzymes, used to treat or prevent conditions caused by
PT undesirable elevation of reactive oxygen species and other free radicals.
XX
PS Example 2; Page 46; 102pp; English.
XX
CC The invention relates to peptide compounds and methods for upregulating
CC expression of a gene encoding an antioxidative enzyme, such as catalase
CC (CAT) or superoxide dismutase (SOD), to counteract harmful oxidative
CC effects of reactive oxygen species (ROS) and other free radicals. The
CC peptides are used as components of pharmaceuticals and dietary
CC supplements. The peptides are used to treat or to prevent diseases and
CC conditions characterised by undesirable elevation of ROS and other free
CC radicals, to upregulate AP-1 transcription factor gene expression and to
CC treat pain. The disease or conditions include renal reperfusion damage,
CC cerebral ischaemia (stroke), myocardial infarction (heart attack), head
CC trauma, atherosclerosis, brain trauma, oxygen toxicity in premature
CC infants, premature aging, spinal cord trauma, neurodegenerative diseases,
CC Huntington's disease, Parkinson's disease, amyotrophic lateral sclerosis,
CC Alzheimer's disease, arthritis and other inflammatory diseases, diabetes,
CC ulcerative colitis, human leukaemia and other cancers characterised by
CC elevation of ROS or free radicals, age-related elevation of ROS or free
CC radicals, senility, Down's syndrome, macular degeneration, cataracts,
CC septic shock, polytraumatous shock, schizophrenia, burn injuries,
CC epilepsy, radiation and/or drug-induced elevation of ROS and free
CC radicals, where the drug is a neuroleptic or a drug such as clozapine
CC defined in the specification and Tardive dyskinesia. The present sequence
CC is rat SOD probe sense strand
XX
SQ Sequence 25 BP; 5 A; 5 C; 10 G; 5 T; 0 U; 0 Other;

Query Match 2.6%; Score 22.4; DB 1; Length 25;
Best Local Similarity 95.8%; Pred. No. 47;
Matches 23; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 312 GAGACTTGGGCAATGTGACTGCTG 335
||||| ||||||||||||||||||||
Db 1 GAGACCTGGGCAATGTGACTGCTG 24

RESULT 21
AAD29666/c
ID AAD29666 standard; DNA; 27 BP.
XX
AC AAD29666;
XX
DT 17-MAY-2002 (first entry)
XX
DE Human Zn-SOD amplifying reverse primer.
XX
KW Oligolysine; transducing domain; oligolysine-cargo molecule complex;
KW SOD related disease; angiitis; glomerulonephritis; autoimmune disease;
KW apoplexy; myocardial infarction; dysrhythmia; angina pectoris; malaria;
KW cytoplasm; idiopathic haemochromatosis; radiation treatment; progeria;
KW disease-related aging; sickle-cell anaemia; pulmonary emphysema;
KW myocardiopathy; autoimmune nephrotic syndrome; Alzheimer's disease;
KW betelnut-related oral caner; hyperbaric oxygen disease; gene therapy;
KW Parkinson's disease; cataract; nephrotropic; cytostatic; nootropic;
KW hepatotrophic; neuroprotective; ophthalmological; immunosuppressive;
KW protozoacide; cardiant; human; Zn-SOD; PCR primer; ss.
XX

```
CC   The invention relates to a composition that comprises 2-methoxyestradiol
CC   and an agent that increases intracellular superoxide anion. 2-
CC   methoxyestradiol inhibits superoxide dismutase (SOD) including cytosolic
CC   SOD1 (CuZn-SOD) and mitochondrial SOD2 (Mn-SOD). It compromises the
CC   cell's ability to eliminate superoxide anion. The composition can be used
CC   for killing cells (preferably cancer cells derived from a solid tumour
CC   especially leukemia cells) in humans; for treating cancer in humans.
CC   Sequences ABA94685-686 represent PCR primers for amplifying SOD1 cDNA
XX
SQ   Sequence 23 BP; 9 A; 9 C; 3 G; 2 T; 0 U; 0 Other;

  Query Match             2.6%;  Score 23;  DB 1;  Length 23;
  Best Local Similarity   100.0%;  Pred. No. 38;
  Matches   23;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        486 CTGGAAGTCGTTTGGCTTGTGGT 508
              |||||||||||||||||||||||
Db         23 CTGGAAGTCGTTTGGCTTGTGGT 1


RESULT 17
ABA94685
ID   ABA94685 standard; DNA; 23 BP.
XX
AC   ABA94685;
XX
DT   23-APR-2002  (first entry)
XX
DE   Superoxide dismutase SOD1 cDNA amplifying forward primer.
XX
KW   2-methoxyestradiol; superoxide anion; superoxide dismutase; SOD;
KW   cytostatic; cancer; tumour; SOD1; PCR primer; ss.
XX
OS   Homo sapiens.
XX
PN   WO200203979-A2.
XX
PD   17-JAN-2002.
XX
PF   11-JUL-2001; 2001WO-US022332.
XX
PR   12-JUL-2000; 2000US-0217589P.
PR   05-JUL-2001; 2001US-00899807.
XX
PA   (TEXA ) UNIV TEXAS SYSTEM.
XX
PI   Huang P,  Plunkett WK,  Feng L;
XX
DR   WPI; 2002-164592/21.
XX
PT   Composition for treating cancer comprises 2-methoxyestradiol and an agent
PT   that increases intracellular superoxide anion.
XX
PS   Example 1; Page 37; 91pp; English.
XX
CC   The invention relates to a composition that comprises 2-methoxyestradiol
CC   and an agent that increases intracellular superoxide anion. 2-
CC   methoxyestradiol inhibits superoxide dismutase (SOD) including cytosolic
CC   SOD1 (CuZn-SOD) and mitochondrial SOD2 (Mn-SOD). It compromises the
CC   cell's ability to eliminate superoxide anion. The composition can be used
CC   for killing cells (preferably cancer cells derived from a solid tumour
CC   especially leukemia cells) in humans; for treating cancer in humans.
CC   Sequences ABA94685-686 represent PCR primers for amplifying SOD1 cDNA
XX
SQ   Sequence 23 BP; 5 A; 5 C; 9 G; 4 T; 0 U; 0 Other;

  Query Match             2.6%;  Score 23;  DB 1;  Length 23;
  Best Local Similarity   100.0%;  Pred. No. 38;
  Matches   23;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy         71 ACGAAGGCCGTGTGCGTGCTGAA 93
              |||||||||||||||||||||||
Db          1 ACGAAGGCCGTGTGCGTGCTGAA 23


RESULT 18
ABX12365/c
ID   ABX12365 standard; DNA; 23 BP.
XX
AC   ABX12365;
XX
DT   10-MAY-2003  (first entry)
XX
DE   Oxidative stress detection PCR primer #6.
XX
KW   Oxidative stress detection; PCR; primer; ss; risk factor.
XX
OS   Homo sapiens.
XX
PN   WO2003016527-A2.
XX
PD   27-FEB-2003.
XX
PF   13-AUG-2002; 2002WO-EP009079.
XX
PR   14-AUG-2001; 2001BE-00000545.
XX
PA   (PROB-) PROBIOX SA.
XX
PI   Pincemail J,  Piette J,  Marechal D;
XX
DR   WPI; 2003-268334/26.
XX
PT   Determining oxidative stress markers in a group of individuals by
PT   comparing the amount of each of the oxidative stress markers obtained
PT   from each of the group of individuals with that of the group of healthy
PT   individuals.
XX
PS   Disclosure; Page 34; 67pp; English.
XX
CC   The invention relates to a method for determining oxidative stress
CC   markers in a group of individuals. The method comprises determining the
CC   risk factor for oxidative stress in the group, measuring the amount of at
CC   least 10 different oxidative stress markers in a sample obtained from
CC   each of the group of individuals, and comparing the amount of each of the
CC   oxidative stress markers with the amount of each of the oxidative stress
CC   markers measured in a group of healthy individuals to determine whether
CC   the oxidative stress markers are increased or decreased in the group of
CC   individuals carrying a risk factor for oxidative stress relative to
CC   healthy individuals. This sequence represents a PCR primer used to detect
CC   oxidative stress
XX
SQ   Sequence 23 BP; 6 A; 4 C; 7 G; 6 T; 0 U; 0 Other;

  Query Match             2.6%;  Score 23;  DB 1;  Length 23;
  Best Local Similarity   100.0%;  Pred. No. 38;
  Matches   23;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        383 CTCTCAGGAGACCATTGCATCAT 405
              |||||||||||||||||||||||
Db         23 CTCTCAGGAGACCATTGCATCAT 1


RESULT 19
ABX12364
ID   ABX12364 standard; DNA; 23 BP.
XX
AC   ABX12364;
XX
DT   10-MAY-2003  (first entry)
XX
DE   Oxidative stress detection PCR primer #5.
XX
KW   Oxidative stress detection; PCR; primer; ss; risk factor.
XX
OS   Homo sapiens.
```

```
XX
DE   Human SOD1 exon 5 PCR primer #2.
XX
KW   SOD1; SOD2; SOD3; Cu/Zn; superoxide dismutase; mitochondrial; treatment;
KW   extracellular; neurogenerative disease; amyotrophic lateral sclerosis;
KW   familial; ALS; PCR primer; ss.
XX
OS   Synthetic.
OS   Homo sapiens.
XX
PN   US5849290-A.
XX
PD   15-DEC-1998.
XX
PF   07-JUN-1995;   95US-00486953.
XX
PR   26-FEB-1993;   93US-00023980.
PR   28-FEB-1994;   94US-00204052.
XX
PA   (MASI ) MASSACHUSETTS INST TECHNOLOGY.
PA   (GEHO ) GEN HOSPITAL CORP.
XX
PI   Rosen DR,  Brown R,  Horvitz HR;
XX
DR   WPI; 1999-069657/06.
XX
PT   Treatment of neurodegenerative disease - by administering super-oxide
PT   dismutase.
XX
PS   Disclosure; Fig 5; 53pp; English.
XX
CC   AAV73826-V73835 are PCR primers used in the amplification of a novel
CC   human SOD1 gene which encodes a Cu/Zn SOD (superoxide dismutase) protein.
CC   This protein can be used in a method for treating a neurodegenerative
CC   disease particularly familial amyotrophic lateral sclerosis (ALS)
XX
SQ   Sequence 24 BP; 9 A; 2 C; 9 G; 4 T; 0 U; 0 Other;

  Query Match             2.7%;  Score 24;  DB 1;  Length 24;
  Best Local Similarity   100.0%;  Pred. No. 33;
  Matches   24;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        556 CCCTTAACTCATCTGTTATCCTGC 579
              ||||||||||||||||||||||||
Db         24 CCCTTAACTCATCTGTTATCCTGC 1


RESULT 15
ADO55698/c
ID   ADO55698 standard; DNA; 24 BP.
XX
AC   ADO55698;
XX
DT   15-JUL-2004  (first entry)
XX
DE   Human cytosolic superoxide dismutase (Cu/ZnSOD) DNA, SOD1 PCR primer #10.
XX
KW   Human; cytosolic superoxide dismutase; Cu/ZnSOD; SOD; SOD1; PCR; ss;
KW   neurodegenerative disease; cell death disease; FALS; neoplasm; primer.
XX
OS   Homo sapiens.
XX
PN   US6723893-B1.
XX
PD   20-APR-2004.
XX
PF   28-FEB-1994;   94US-00204052.
XX
PR   26-FEB-1993;   93US-00023980.
XX
PA   (MASI ) MASSACHUSETTS INST TECHNOLOGY.
PA   (GEHO ) GEN HOSPITAL CORP INC.
XX
PI   Brown R,  Horvitz HR,  Rosen DR;
XX
DR   WPI; 2004-326924/30.
XX
PT   New transgenic mouse having somatic and germ cells containing a transgene
PT   encoding and expressing a neurodegenerative disease-causing mutant SOD-1
PT   polypeptide, useful for research or drug development.
XX
PS   Disclosure; SEQ ID NO 13; 54pp; English.
XX
CC   The invention relates to a transgenic mouse having somatic and germ cells
CC   containing a transgene encoding and expressing a neurodegenerative
CC   disease-causing mutant SOD1 polypeptide. The invention also relates to a
CC   method of diagnosing an increased likelihood of developing cell death
CC   disease in a patient, a kit for the diagnosis of cell death disease in a
CC   patient, a method of treating a patient with a disease involving a mutant
CC   SOD encoding gene, antibodies reactive with a FALS polypeptide, a method
CC   of treating a patient with a neoplasm, a bacterial or yeast cell
CC   containing a purified nucleic acid derived from a FALS gene, a purified
CC   DNA encoding a purified FALS polypeptide and a purified FALS polypeptide.
CC   The SOD1 polypeptide is a murine or human SOD1 polypeptide. The
CC   expression of the mutant polypeptide is under the regulation of the wild-
CC   type promoter. The transgenic mouse is useful for research or drug
CC   development. This sequence represents a PCR primer used to amplify SOD1
CC   DNA encoding the human cytosolic superoxide dismutase (Cu/ZnSOD)
CC   polypeptide.
XX
SQ   Sequence 24 BP; 9 A; 2 C; 9 G; 4 T; 0 U; 0 Other;

  Query Match             2.7%;  Score 24;  DB 1;  Length 24;
  Best Local Similarity   100.0%;  Pred. No. 33;
  Matches   24;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        556 CCCTTAACTCATCTGTTATCCTGC 579
              ||||||||||||||||||||||||
Db         24 CCCTTAACTCATCTGTTATCCTGC 1


RESULT 16
ABA94686/c
ID   ABA94686 standard; DNA; 23 BP.
XX
AC   ABA94686;
XX
DT   23-APR-2002  (first entry)
XX
DE   Superoxide dismutase SOD1 cDNA amplifying reverse primer.
XX
KW   2-methoxyestradiol; superoxide anion; superoxide dismutase; SOD;
KW   cytostatic; cancer; tumour; SOD1; PCR primer; ss.
XX
OS   Homo sapiens.
XX
PN   WO200203979-A2.
XX
PD   17-JAN-2002.
XX
PF   11-JUL-2001; 2001WO-US022332.
XX
PR   12-JUL-2000; 2000US-0217589P.
PR   05-JUL-2001; 2001US-00899807.
XX
PA   (TEXA ) UNIV TEXAS SYSTEM.
XX
PI   Huang P,  Plunkett WK,  Feng L;
XX
DR   WPI; 2002-164592/21.
XX
PT   Composition for treating cancer comprises 2-methoxyestradiol and an agent
PT   that increases intracellular superoxide anion.
XX
PS   Example 1; Page 37; 91pp; English.
XX
```

```
CC   comprising the populations for each physiological source to identify
CC   differences in the population, where the comparison is preferably
CC   performed by hybridising the labeled NAs for each of the distinct
CC   physiological sources to an array of probe NAs stably associated with the
CC   surface of a substrate to produce a hybridisation pattern for each of the
CC   sources, and comparing the patterns for each of the sources, where
CC   differential gene expression assays are utilised in differential
CC   expression analysis of diseased a normal tissue e.g. neoplastic a normal
CC   tissue, or different tissue or subtissue types. The present sequence is a
CC   human gene specific PCR primer used in the method of the invention. Note:
CC   The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format directly from USPTO
CC   at http.wipo.seqdata.uspto.gov/sequence.html?DocID=6352829B1
XX
SQ   Sequence 28 BP; 7 A; 5 C; 9 G; 7 T; 0 U; 0 Other;

  Query Match             3.2%;  Score 28;  DB 1;  Length 28;
  Best Local Similarity   100.0%;  Pred. No. 17;
  Matches   28;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        376 GATCTCACTCTCAGGAGACCATTGCATC 403
              ||||||||||||||||||||||||||||
Db         28 GATCTCACTCTCAGGAGACCATTGCATC 1


RESULT 12
ABA94683/c
ID   ABA94683 standard; DNA; 27 BP.
XX
AC   ABA94683;
XX
DT   23-APR-2002  (first entry)
XX
DE   Antisense S-oligo against superoxide dismutase SOD1.
XX
KW   2-methoxyestradiol; superoxide anion; superoxide dismutase; SOD;
KW   cytostatic; cancer; tumour; SOD1; antisense; ss.
XX
OS   Synthetic.
XX
PN   WO200203979-A2.
XX
PD   17-JAN-2002.
XX
PF   11-JUL-2001; 2001WO-US022332.
XX
PR   12-JUL-2000; 2000US-0217589P.
PR   05-JUL-2001; 2001US-00899807.
XX
PA   (TEXA ) UNIV TEXAS SYSTEM.
XX
PI   Huang P,  Plunkett WK,  Feng L;
XX
DR   WPI; 2002-164592/21.
XX
PT   Composition for treating cancer comprises 2-methoxyestradiol and an agent
PT   that increases intracellular superoxide anion.
XX
PS   Disclosure; Page 6; 91pp; English.
XX
CC   The invention relates to a composition that comprises 2-methoxyestradiol
CC   and an agent that increases intracellular superoxide anion. 2-
CC   methoxyestradiol inhibits superoxide dismutase (SOD) including cytosolic
CC   SOD1 (CuZn-SOD) and mitochondrial SOD2 (Mn-SOD). It compromises the
CC   cell's ability to eliminate superoxide anion. The composition can be used
CC   for killing cells (preferably cancer cells derived from a solid tumour
CC   especially leukemia cells) in humans; for treating cancer in humans.
CC   Sequences ABA94683-684 represent antisense S-oligos directed against SOD1
XX
SQ   Sequence 27 BP; 6 A; 11 C; 5 G; 5 T; 0 U; 0 Other;

  Query Match             3.1%;  Score 27;  DB 1;  Length 27;
  Best Local Similarity   100.0%;  Pred. No. 20;
  Matches   27;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy         61 AGTTATGGCGACGAAGGCCGTGTGCGT 87
              |||||||||||||||||||||||||||
Db         27 AGTTATGGCGACGAAGGCCGTGTGCGT 1


RESULT 13
AAQ67485/c
ID   AAQ67485 standard; DNA; 24 BP.
XX
AC   AAQ67485;
XX
DT   25-MAR-2003  (revised)
DT   31-MAY-1995  (first entry)
XX
DE   PCR primer for human SOD1 exon 5.
XX
KW   Human superoxide dismutase; hSOD1; neurodegeneration;
KW   Alzheimer's disease; Parkinson's disease; Huntington's disease;
KW   Hallervorden-Spatz disease; olivopontocerebellar atrophy;
KW   familial amyotrophic lateral sclerosis; FALS; diagnosis; mutant SOD;
KW   SSCP analysis; ss.
XX
OS   Synthetic.
XX
PN   WO9419493-A1.
XX
PD   01-SEP-1994.
XX
PF   28-FEB-1994;   94WO-US002089.
XX
PR   26-FEB-1993;   93US-00023980.
XX
PA   (GEHO ) GEN HOSPITAL CORP.
PA   (MASI ) MASSACHUSETTS INST TECHNOLOGY.
XX
PI   Brown R,  Horvitz HR,  Rosen DR;
XX
DR   WPI; 1994-294353/36.
XX
PT   Diagnosis, treatment and prevention of diseases of cell death - e.g.
PT   amyotrophic lateral sclerosis, which are the result of e.g. decreased SOD
PT   activity.
XX
PS   Claim 8; Fig 5; 94pp; English.
XX
CC   The presence of a mutation in a gene encoding a superoxide dismutase
CC   (SOD1, SOD2 or SOD3) indicates an increased likelihood of developing a
CC   cell death disease, specifically a neurodegenerative disease. The DNA can
CC   be analysed to detect mutant SOD sequences. Analysis is pref. preceded by
CC   a PCR amplification step. AAQ67476- AAQ67485 are examples of PCR primers
CC   which are useful for diagnosis of diseases linked to SOD1 mutations.
CC   (Updated on 25-MAR-2003 to correct PN field.)
XX
SQ   Sequence 24 BP; 9 A; 2 C; 9 G; 4 T; 0 U; 0 Other;

  Query Match             2.7%;  Score 24;  DB 1;  Length 24;
  Best Local Similarity   100.0%;  Pred. No. 33;
  Matches   24;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        556 CCCTTAACTCATCTGTTATCCTGC 579
              ||||||||||||||||||||||||
Db         24 CCCTTAACTCATCTGTTATCCTGC 1


RESULT 14
AAV73835/c
ID   AAV73835 standard; DNA; 24 BP.
XX
AC   AAV73835;
XX
DT   24-FEB-1999  (first entry)
```

```
XX
PS   Example 4; SEQ ID NO 15; 61pp; English.
XX
CC   The present sequence is a human superoxide dismutase (SOD1) wild-type
CC   sequence, which was used to demonstrate the method of the invention. The
CC   invention provides methods of specifically inhibiting the expression of a
CC   mutant allele, while preserving the expression of a co-expressed wild-
CC   type allele, using RNA interference (RNAi). The methods are useful for
CC   treating a subject having a disorder correlated with the presence of a
CC   dominant gain of function mutant allele, e.g. amyotrophic lateral
CC   sclerosis (ALS, caused by SOD mutation), Huntington's disease,
CC   Alzheimer's disease, and Parkinson's disease (claimed). To test whether
CC   small hairpin RNA (shRNA) can selectively block the expression of a
CC   mutant but not wild-type SOD1 expression, a plasmid was constructed that
CC   synthesised an shRNA ADO43056 homologous to a disease-causing mutant
CC   SOD1, G93A (nucleotide change from G to C at nucleotide position 281,
CC   placing a G:G mismatch at selective sites between the shRNA and wild-type
CC   SOD1) under the control of a RNA polymerase III promoter. Results showed
CC   that when co-transfected with either wild-type or mutant SOD1-GFP
CC   plasmids, this construct triggered single-nucleotide selective RNAi of
CC   mutant SOD1 in cultured cells.
XX
SQ   Sequence 35 BP; 8 A; 6 C; 11 G; 10 T; 0 U; 0 Other;

  Query Match             4.0%;  Score 35;  DB 1;  Length 35;
  Best Local Similarity   100.0%;  Pred. No. 5.1;
  Matches   35;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        329 ACTGCTGACAAAGATGGTGTGGCCGATGTGTCTAT 363
              |||||||||||||||||||||||||||||||||||
Db          1 ACTGCTGACAAAGATGGTGTGGCCGATGTGTCTAT 35


RESULT 10
ABK66923
ID   ABK66923 standard; DNA; 28 BP.
XX
AC   ABK66923;
XX
DT   02-JUL-2002  (first entry)
XX
DE   Human gene specific PCR primer #1011.
XX
KW   Primer; ss; DNA microarray; differential expression analysis; human.
XX
OS   Homo sapiens.
XX
PN   US6352829-B1.
XX
PD   05-MAR-2002.
XX
PF   05-JAN-1999;   99US-00225928.
XX
PR   21-MAY-1997;   97US-00859998.
XX
PA   (CLON-) CLONTECH LAB INC.
XX
PI   Chenchik A,  Jokhadze G,  Bibilashvilli R;
XX
DR   WPI; 2002-314699/35.
XX
PT   Producing sub-population of labeled nucleic acids, useful for analyzing
PT   differences in RNA profiles between several different physiological
PT   sources, using set of distinct gene specific primers.
XX
PS   Example 3; SEQ ID NO 1011; 11pp; English.
XX
CC   The invention relates to producing a sub-population of labeled nucleic
CC   acids (NAs) comprising contacting a NA sample from a physiological
CC   source, with a pool of 50 distinct gene specific primers under suitable
CC   conditions to enzymatically generate sub-population of NAs, where each
CC   gene specific primer has a sequence complementary to a distinct mRNA, and
CC   each labeled NA is generated using a single gene specific primer. The
CC   method is useful for producing a sub-population of labeled NAs which is
CC   useful for analysing the differences in the RNA profiles between several
CC   different physiological sources, where the method comprises producing
CC   subpopulation of labeled NAs for the different physiological sources,
CC   comprising the populations for each physiological source to identify
CC   differences in the population, where the comparison is preferably
CC   performed by hybridising the labeled NAs for each of the distinct
CC   physiological sources to an array of probe NAs stably associated with the
CC   surface of a substrate to produce a hybridisation pattern for each of the
CC   sources, and comparing the patterns for each of the sources, where
CC   differential gene expression assays are utilised in differential
CC   expression analysis of diseased a normal tissue e.g. neoplastic a normal
CC   tissue, or different tissue or subtissue types. The present sequence is a
CC   human gene specific PCR primer used in the method of the invention. Note:
CC   The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format directly from USPTO
CC   at http.wipo.seqdata.uspto.gov/sequence.html?DocID=6352829B1
XX
SQ   Sequence 28 BP; 8 A; 6 C; 8 G; 6 T; 0 U; 0 Other;

  Query Match             3.2%;  Score 28;  DB 1;  Length 28;
  Best Local Similarity   100.0%;  Pred. No. 17;
  Matches   28;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        106 AGTGCAGGGCATCATCAATTTCGAGCAG 133
              ||||||||||||||||||||||||||||
Db          1 AGTGCAGGGCATCATCAATTTCGAGCAG 28


RESULT 11
ABK66924/c
ID   ABK66924 standard; DNA; 28 BP.
XX
AC   ABK66924;
XX
DT   02-JUL-2002  (first entry)
XX
DE   Human gene specific PCR primer #1012.
XX
KW   Primer; ss; DNA microarray; differential expression analysis; human.
XX
OS   Homo sapiens.
XX
PN   US6352829-B1.
XX
PD   05-MAR-2002.
XX
PF   05-JAN-1999;   99US-00225928.
XX
PR   21-MAY-1997;   97US-00859998.
XX
PA   (CLON-) CLONTECH LAB INC.
XX
PI   Chenchik A,  Jokhadze G,  Bibilashvilli R;
XX
DR   WPI; 2002-314699/35.
XX
PT   Producing sub-population of labeled nucleic acids, useful for analyzing
PT   differences in RNA profiles between several different physiological
PT   sources, using set of distinct gene specific primers.
XX
PS   Example 3; SEQ ID NO 1012; 11pp; English.
XX
CC   The invention relates to producing a sub-population of labeled nucleic
CC   acids (NAs) comprising contacting a NA sample from a physiological
CC   source, with a pool of 50 distinct gene specific primers under suitable
CC   conditions to enzymatically generate sub-population of NAs, where each
CC   gene specific primer has a sequence complementary to a distinct mRNA, and
CC   each labeled NA is generated using a single gene specific primer. The
CC   method is useful for producing a sub-population of labeled NAs which is
CC   useful for analysing the differences in the RNA profiles between several
CC   different physiological sources, where the method comprises producing
CC   subpopulation of labeled NAs for the different physiological sources,
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XX
PD 31-JUL-1992.
XX
PF 11-DEC-1990; 90JP-00401323.
XX
PR 11-DEC-1990; 90JP-00401323.
XX
PA (SUNR) SUNTORY LTD.
PA (INOU/) INOUE M.
XX
DR WPI; 1992-304666/37.
XX
PT New hypotensive agents - comprise superoxidedismutase with attached
PT heparin binding site.
XX
PS Disclosure; Page 4; 9pp; Japanese.
XX
CC The sequences given in AAQ27817-20 are primers which were used to amplify
CC the superoxidase dismutase (SOD) gene which is used in the production of
CC a new hypotensive agent. The amplification product of these reactions is
CC ligated to a heparin binding site (HBS). SOD does not naturally contain
CC an HBS. This new construct can exert hypotensive activity in vivo as the
CC active component can be concentrated in the blood vessel endothelial
CC cells
XX
SQ Sequence 40 BP; 14 A; 6 C; 12 G; 8 T; 0 U; 0 Other;

Query Match 4.6%; Score 40; DB 1; Length 40;
Best Local Similarity 100.0%; Pred. No. 2.1;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 464 GAAAGTACAAAGACAGGAAACGCTGGAAGTCGTTTGGCTT 503
||||||||||||||||||||||||||||||||||||||||
Db 1 GAAAGTACAAAGACAGGAAACGCTGGAAGTCGTTTGGCTT 40

RESULT 8
ADE52418
ID ADE52418 standard; DNA; 35 BP.
XX
AC ADE52418;
XX
DT 29-JAN-2004 (first entry)
XX
DE Wild-type human SOD1 partial DNA sequence.
XX
KW Suppression of gene expression; eukaryotic cell; RNA polymerase promoter;
KW target DNA sequence; RNA polymerase termination signal;
KW hairpin structure; RNA polymerase III; RNA Pol III; mutated protein;
KW cancer; leukaemia; haemophilia; viral infection; bacterial infection;
KW neurodegenerative disease; Alzheimer's disease; Parkinson's disease;
KW Huntington's disease; amyotrophic lateral sclerosis; ALS; cytostatic;
KW haemostatic; virucide; antibacterial; neuroprotective; nootropic;
KW anticonvulsant; antiparkinsonian; human; superoxide dismutase 1; SOD1;
KW ds.
XX
OS Homo sapiens.
XX
PN US2003180756-A1.
XX
PD 25-SEP-2003.
XX
PF 21-NOV-2002; 2002US-00301516.
XX
PR 21-MAR-2002; 2002US-0366478P.
XX
PA (SHIY/) SHI Y.
PA (SUIG/) SUI G.
XX
PI Shi Y, Sui G;
XX
DR WPI; 2003-852231/79.
XX
PT New nucleic acids, useful for inhibiting the synthesis of a target
PT protein in a eukaryotic cell, or for treating various diseases by
PT inhibiting the expression of abnormal or mutated proteins, e.g. leukemia,
PT viral or bacterial infection.
XX
PS Example 6; Fig 7A; 38pp; English.
XX
CC The present invention relates to a method for suppressing gene expression
CC in cells, particularly eukaryotic cells. The method involves a new
CC nucleic acid comprising in a 5'-3' order: an RNA polymerase promoter
CC sequence, a first target sequence that is essentially complementary to a
CC sequence of a target nucleic acid or its complement, a spacer sequence, a
CC second target sequence that is essentially complementary to the first
CC target sequence, and an RNA polymerase termination signal, where an RNA
CC transcribed from the nucleic acid can inhibit expression of the target
CC gene. The RNA transcribed from the nucleic acid may form a hairpin
CC structure. The polymerase is preferably RNA polymerase III (Pol III) and
CC the polymerase termination signal comprises a number of thymidines
CC sufficient for arresting Pol III activity. The nucleic acids and methods
CC are useful for suppressing gene expression in cells, or inhibiting the
CC synthesis of a target protein in a eukaryotic cell or in a cell of a
CC subject. The nucleic acids can be used for treating various diseases by
CC inhibiting the expression of abnormal or mutated proteins, e.g. cancers
CC such as leukaemia, haemophilia, viral or bacterial infections, and
CC neurodegenerative diseases including Alzheimer's disease, Parkinson's
CC disease, Huntington's disease and amyotrophic lateral sclerosis (ALS).
CC The present sequence represents a partial DNA sequence from the wild-type
CC human superoxide dismutase 1 (SOD1) gene.
XX
SQ Sequence 35 BP; 8 A; 6 C; 11 G; 10 T; 0 U; 0 Other;

Query Match 4.0%; Score 35; DB 1; Length 35;
Best Local Similarity 100.0%; Pred. No. 5.1;
Matches 35; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 329 ACTGCTGACAAAGATGGTGTGGCCGATGTGTCTAT 363
|||||||||||||||||||||||||||||||||||
Db 1 ACTGCTGACAAAGATGGTGTGGCCGATGTGTCTAT 35

RESULT 9
ADO43055
ID ADO43055 standard; mRNA; 35 BP.
XX
AC ADO43055;
XX
DT 12-AUG-2004 (first entry)
XX
DE Superoxide dismutase wild-type target for RNA interference.
XX
KW Superoxide dismutase; SOD; enzyme; amyotrophic lateral sclerosis;
KW RNA interference; gene silencing; human; ss.
XX
OS Homo sapiens.
XX
PN WO2004042027-A2.
XX
PD 21-MAY-2004.
XX
PF 04-NOV-2003; 2003WO-US035009.
XX
PR 04-NOV-2002; 2002US-0423507P.
PR 18-JUL-2003; 2003US-0488283P.
XX
PA (UYMA-) UNIV MASSACHUSETTS.
XX
PI Xu Z, Zamore PD;
XX
DR WPI; 2004-390611/36.
XX
PT Inhibiting expression of a target allele in a cell comprising at least
PT two different alleles of a gene, for treating CNS disorders, comprises
PT administering to the cell an siRNA specific for the target allele.

KW neurodegenerative disease; Alzheimer's disease; Parkinson's disease;
KW Huntington's disease; amyotrophic lateral sclerosis; ALS; cytostatic;
KW haemostatic; virucide; antibacterial; neuroprotective; nootropic;
KW anticonvulsant; antiparkinsonian; human; superoxide dismutase 1; SOD1;
KW G256C mutant; ss.
XX
OS Synthetic.
OS Homo sapiens.
XX
PN US2003180756-A1.
XX
PD 25-SEP-2003.
XX
PF 21-NOV-2002; 2002US-00301516.
XX
PR 21-MAR-2002; 2002US-0366478P.
XX
PA (SHIY/) SHI Y.
PA (SUIG/) SUI G.
XX
PI Shi Y, Sui G;
XX
DR WPI; 2003-852231/79.
XX
PT New nucleic acids, useful for inhibiting the synthesis of a target
PT protein in a eukaryotic cell, or for treating various diseases by
PT inhibiting the expression of abnormal or mutated proteins, e.g. leukemia,
PT viral or bacterial infection.
XX
PS Example 6; Fig 5A; 38pp; English.
XX
CC The present invention relates to a method for suppressing gene expression
CC in cells, particularly eukaryotic cells. The method involves a new
CC nucleic acid comprising in a 5'-3' order: an RNA polymerase promoter
CC sequence, a first target sequence that is essentially complementary to a
CC sequence of a target nucleic acid or its complement, a spacer sequence, a
CC second target sequence that is essentially complementary to the first
CC target sequence, and an RNA polymerase termination signal, where an RNA
CC transcribed from the nucleic acid can inhibit expression of the target
CC gene. The RNA transcribed from the nucleic acid may form a hairpin
CC structure. The polymerase is preferably RNA polymerase III (Pol III) and
CC the polymerase termination signal comprises a number of thymidines
CC sufficient for arresting Pol III activity. The nucleic acids and methods
CC are useful for suppressing gene expression in cells, or inhibiting the
CC synthesis of a target protein in a eukaryotic cell or in a cell of a
CC subject. The nucleic acids can be used for treating various diseases by
CC inhibiting the expression of abnormal or mutated proteins, e.g. cancers
CC such as leukaemia, haemophilia, viral or bacterial infections, and
CC neurodegenerative diseases including Alzheimer's disease, Parkinson's
CC disease, Huntington's disease and amyotrophic lateral sclerosis (ALS).
CC The present sequence represents a partial RNA sequence from the human
CC superoxide dismutase 1 (SOD1) G256C mutant gene.
XX
SQ Sequence 48 BP; 13 A; 7 C; 17 G; 0 T; 11 U; 0 Other;

Query Match 5.3%; Score 46.4; DB 1; Length 48;
Best Local Similarity 75.0%; Pred. No. 0.67;
Matches 36; Conservative 11; Mismatches 1; Indels 0; Gaps 0;

```
Qy        299 GAGAGGCATGTTGGAGACTTGGGCAATGTGACTGCTGACAAAGATGGT 346
              ||||||||:|::||||||::| ||||:|:|||:||:||||||||:||:
Db          1 GAGAGGCAUGUUGGAGACUUGCGCAAUGUGACUGCUGACAAAGAUGGU 48
```

RESULT 6
ADO43048
ID ADO43048 standard; mRNA; 48 BP.
XX
AC ADO43048;
XX
DT 12-AUG-2004 (first entry)
XX
DE Superoxide dismutase mutant allele target for RNA interference.
XX
KW Superoxide dismutase; SOD; enzyme; amyotrophic lateral sclerosis;
KW RNA interference; gene silencing; human; ss.
XX
OS Homo sapiens.
XX
FH Key Location/Qualifiers
FT allele replace(22,g)
FT /*tag= a
XX
PN WO2004042027-A2.
XX
PD 21-MAY-2004.
XX
PF 04-NOV-2003; 2003WO-US035009.
XX
PR 04-NOV-2002; 2002US-0423507P.
PR 18-JUL-2003; 2003US-0488283P.
XX
PA (UYMA-) UNIV MASSACHUSETTS.
XX
PI Xu Z, Zamore PD;
XX
DR WPI; 2004-390611/36.
XX
PT Inhibiting expression of a target allele in a cell comprising at least
PT two different alleles of a gene, for treating CNS disorders, comprises
PT administering to the cell an siRNA specific for the target allele.
XX
PS Example 1; SEQ ID NO 8; 61pp; English.
XX
CC The present sequence is a human superoxide dismutase (SOD1) mutant allele
CC target sequence for RNA interference (RNAi). In comparison to the wild-
CC type allele ADO43047, a single nucleotide change of guanosine to cytosine
CC at position 256 (relative to the start of translation) causes a Gly to
CC Arg mutation (G85R). The invention provides methods of specifically
CC inhibiting the expression of a mutant allele, while preserving the
CC expression of a co-expressed wild-type allele, using RNA interference
CC (RNAi). The methods are useful for treating a subject having a disorder
CC correlated with the presence of a dominant gain of function mutant
CC allele, e.g. amyotrophic lateral sclerosis (ALS), Huntington's disease,
CC Alzheimer's disease, and Parkinson's disease (claimed). Small interfering
CC RNAs (siRNA) are provided ADO43041-ADO43046 that selectively suppress
CC mutant, but not wild-type, expression of SOD1, which causes inherited
CC ALS.
XX
SQ Sequence 48 BP; 13 A; 7 C; 17 G; 0 T; 11 U; 0 Other;

Query Match 5.3%; Score 46.4; DB 1; Length 48;
Best Local Similarity 75.0%; Pred. No. 0.67;
Matches 36; Conservative 11; Mismatches 1; Indels 0; Gaps 0;

```
Qy        299 GAGAGGCATGTTGGAGACTTGGGCAATGTGACTGCTGACAAAGATGGT 346
              ||||||||:|::||||||::| ||||:|:|||:||:||||||||:||:
Db          1 GAGAGGCAUGUUGGAGACUUGCGCAAUGUGACUGCUGACAAAGAUGGU 48
```

RESULT 7
AAQ27817
ID AAQ27817 standard; DNA; 40 BP.
XX
AC AAQ27817;
XX
DT 12-FEB-1993 (first entry)
XX
DE Primer AO39.
XX
KW Superoxidase dismutase; SOD; HBS; PCR; polymerase chain reaction; PCR;
KW hypotensive; blood vessel; endothelium; ss.
XX
OS Synthetic.
XX
PN JP04210649-A.

KW Suppression of gene expression; eukaryotic cell; RNA polymerase promoter;
KW target DNA sequence; RNA polymerase termination signal;
KW hairpin structure; RNA polymerase III; RNA Pol III; mutated protein;
KW cancer; leukaemia; haemophilia; viral infection; bacterial infection;
KW neurodegenerative disease; Alzheimer's disease; Parkinson's disease;
KW Huntington's disease; amyotrophic lateral sclerosis; ALS; cytostatic;
KW haemostatic; virucide; antibacterial; neuroprotective; nootropic;
KW anticonvulsant; antiparkinsonian; human; superoxide dismutase 1; SOD1;
KW ss.
XX
OS Homo sapiens.
XX
PN US2003180756-A1.
XX
PD 25-SEP-2003.
XX
PF 21-NOV-2002; 2002US-00301516.
XX
PR 21-MAR-2002; 2002US-0366478P.
XX
PA (SHIY/) SHI Y.
PA (SUIG/) SUI G.
XX
PI Shi Y, Sui G;
XX
DR WPI; 2003-852231/79.
XX
PT New nucleic acids, useful for inhibiting the synthesis of a target
PT protein in a eukaryotic cell, or for treating various diseases by
PT inhibiting the expression of abnormal or mutated proteins, e.g. leukemia,
PT viral or bacterial infection.
XX
PS Example 6; Fig 5A; 38pp; English.
XX
CC The present invention relates to a method for suppressing gene expression
CC in cells, particularly eukaryotic cells. The method involves a new
CC nucleic acid comprising in a 5'-3' order: an RNA polymerase promoter
CC sequence, a first target sequence that is essentially complementary to a
CC sequence of a target nucleic acid or its complement, a spacer sequence, a
CC second target sequence that is essentially complementary to the first
CC target sequence, and an RNA polymerase termination signal, where an RNA
CC transcribed from the nucleic acid can inhibit expression of the target
CC gene. The RNA transcribed from the nucleic acid may form a hairpin
CC structure. The polymerase is preferably RNA polymerase III (Pol III) and
CC the polymerase termination signal comprises a number of thymidines
CC sufficient for arresting Pol III activity. The nucleic acids and methods
CC are useful for suppressing gene expression in cells, or inhibiting the
CC synthesis of a target protein in a eukaryotic cell or in a cell of a
CC subject. The nucleic acids can be used for treating various diseases by
CC inhibiting the expression of abnormal or mutated proteins, e.g. cancers
CC such as leukaemia, haemophilia, viral or bacterial infections, and
CC neurodegenerative diseases including Alzheimer's disease, Parkinson's
CC disease, Huntington's disease and amyotrophic lateral sclerosis (ALS).
CC The present sequence represents a partial RNA sequence from the wild-type
CC human superoxide dismutase 1 (SOD1) gene.
XX
SQ Sequence 48 BP; 13 A; 6 C; 18 G; 0 T; 11 U; 0 Other;

Query Match 5.5%; Score 48; DB 1; Length 48;
Best Local Similarity 77.1%; Pred. No. 0.48;
Matches 37; Conservative 11; Mismatches 0; Indels 0; Gaps 0;

```
Qy        299 GAGAGGCATGTTGGAGACTTGGGCAATGTGACTGCTGACAAAGATGGT 346
              ||||||||:|::||||||::||||||:|:|||:||:||||||||:||:
Db          1 GAGAGGCAUGUUGGAGACUUGGGCAAUGUGACUGCUGACAAAGAUGGU 48
```

RESULT 4
ADO43047
ID ADO43047 standard; mRNA; 48 BP.
XX
AC ADO43047;
XX
DT 12-AUG-2004 (first entry)
XX
DE Superoxide dismutase wild-type target for RNA interference.
XX
KW Superoxide dismutase; SOD; enzyme; amyotrophic lateral sclerosis;
KW RNA interference; gene silencing; human; ss.
XX
OS Homo sapiens.
XX
FH Key Location/Qualifiers
FT allele replace(22,c)
FT /*tag= a
XX
PN WO2004042027-A2.
XX
PD 21-MAY-2004.
XX
PF 04-NOV-2003; 2003WO-US035009.
XX
PR 04-NOV-2002; 2002US-0423507P.
PR 18-JUL-2003; 2003US-0488283P.
XX
PA (UYMA-) UNIV MASSACHUSETTS.
XX
PI Xu Z, Zamore PD;
XX
DR WPI; 2004-390611/36.
XX
PT Inhibiting expression of a target allele in a cell comprising at least
PT two different alleles of a gene, for treating CNS disorders, comprises
PT administering to the cell an siRNA specific for the target allele.
XX
PS Example 1; SEQ ID NO 7; 61pp; English.
XX
CC The present sequence is a human superoxide dismutase (SOD1) wild-type
CC target sequence for RNA interference (RNAi). In a mutant allele of SOD1
CC ADO43048, a single nucleotide change of guanosine to cytosine at position
CC 256 (relative to the start of translation) causes a Gly to Arg mutation
CC (G85R). The invention provides methods of specifically inhibiting the
CC expression of a mutant allele, while preserving the expression of a co-
CC expressed wild-type allele, using RNA interference (RNAi). The methods
CC are useful for treating a subject having a disorder correlated with the
CC presence of a dominant gain of function mutant allele, e.g. amyotrophic
CC lateral sclerosis (ALS), Huntington's disease, Alzheimer's disease, and
CC Parkinson's disease (claimed). Small interfering RNAs (siRNA) are
CC provided ADO43041-ADO43046 that selectively suppress mutant, but not wild
CC -type, expression of SOD1, which causes inherited ALS.
XX
SQ Sequence 48 BP; 13 A; 6 C; 18 G; 0 T; 11 U; 0 Other;

Query Match 5.5%; Score 48; DB 1; Length 48;
Best Local Similarity 77.1%; Pred. No. 0.48;
Matches 37; Conservative 11; Mismatches 0; Indels 0; Gaps 0;

```
Qy        299 GAGAGGCATGTTGGAGACTTGGGCAATGTGACTGCTGACAAAGATGGT 346
              ||||||||:|::||||||::||||||:|:|||:||:||||||||:||:
Db          1 GAGAGGCAUGUUGGAGACUUGGGCAAUGUGACUGCUGACAAAGAUGGU 48
```

RESULT 5
ADE52414
ID ADE52414 standard; RNA; 48 BP.
XX
AC ADE52414;
XX
DT 29-JAN-2004 (first entry)
XX
DE Human SOD1 mutant (G256C) partial RNA sequence.
XX
KW Suppression of gene expression; eukaryotic cell; RNA polymerase promoter;
KW target DNA sequence; RNA polymerase termination signal;
KW hairpin structure; RNA polymerase III; RNA Pol III; mutated protein;
KW cancer; leukaemia; haemophilia; viral infection; bacterial infection;

253	12.8	1.5	16	1	ADI53301	Target molecule de
254	12.8	1.5	16	1	ADO43601	Mutant DNA fragmen
c 255	12.6	1.4	13	1	ABH27646	Oligonucleotide SE
256	12.6	1.4	13	1	ABH27647	Oligonucleotide SE
257	12.6	1.4	15	1	ABK28501	Paraoxonase 2 (PON

ALIGNMENTS

RESULT 1
ABZ00314
ID ABZ00314 standard; DNA; 50 BP.
XX
AC ABZ00314;
XX
DT 09-JAN-2003 (first entry)
XX
DE Human leukocyte gene expression profiling probe SEQ ID NO 305.
XX
KW T7; leukocyte; gene expression profiling; allograft rejection;
KW atherosclerosis; congestive heart failure; systemic lupus erythematosus;
KW rheumatoid arthritis; osteoarthritis; cytomegalovirus; infection; probe;
KW ss.
XX
OS Homo sapiens.
XX
PN WO200257414-A2.
XX
PD 25-JUL-2002.
XX
PF 22-OCT-2001; 2001WO-US047856.
XX
PR 20-OCT-2000; 2000US-0241994P.
PR 08-JUN-2001; 2001US-0296764P.
XX
PA (BIOC-) BIOCARDIA INC.
XX
PI Wohlgemuth J, Fry K, Matcuk G, Altman P, Prentice J, Phillips J;
PI Ly N, Woodward R, Quertermous T, Johnson F;
XX
DR WPI; 2002-636525/68.
XX
PT New system for leukocyte expression profiling, diagnosing a disease, or
PT monitoring (the rate of) progression of a disease, e.g. atherosclerosis
PT or congestive heart failure, comprises diagnostic oligonucleotides.
XX
PS Claim 1; Page 336; 0pp; English.
XX
CC The invention relates to a system for detecting gene expression, which
CC comprises one or two isolated DNA molecules that detect expression of a
CC gene, where the gene corresponds to any of 8143 oligonucleotides
CC (ABZ00010-ABZ08152) each having 50 base pairs (bp). The system is useful
CC for leukocyte expression profiling. It is particularly useful for
CC diagnosing a disease, monitoring (rate of) progression of a disease,
CC predicting therapeutic outcome, determining prognosis for a patient,
CC predicting disease complications in an individual or monitoring response
CC to treatment in an individual. The diseases include cardiac allograft
CC rejection, kidney allograft rejection, liver allograft rejection,
CC atherosclerosis, congestive heart failure, systemic lupus erythematosus,
CC rheumatoid arthritis, osteoarthritis or cytomegalovirus infection
XX
SQ Sequence 50 BP; 9 A; 15 C; 9 G; 17 T; 0 U; 0 Other;

Query Match 5.7%; Score 50; DB 1; Length 50;
Best Local Similarity 100.0%; Pred. No. 0.33;
Matches 50; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```
Qy        530 ACATTCCCTTGGATGTAGTCTGAGGCCCCTTAACTCATCTGTTATCCTGC 579
              ||||||||||||||||||||||||||||||||||||||||||||||||||
Db          1 ACATTCCCTTGGATGTAGTCTGAGGCCCCTTAACTCATCTGTTATCCTGC 50
```

RESULT 2
ABZ01960
ID ABZ01960 standard; DNA; 50 BP.
XX
AC ABZ01960;
XX
DT 09-JAN-2003 (first entry)
XX
DE Human leukocyte gene expression profiling probe SEQ ID NO 1951.
XX
KW T7; leukocyte; gene expression profiling; allograft rejection;
KW atherosclerosis; congestive heart failure; systemic lupus erythematosus;
KW rheumatoid arthritis; osteoarthritis; cytomegalovirus; infection; probe;
KW ss.
XX
OS Homo sapiens.
XX
PN WO200257414-A2.
XX
PD 25-JUL-2002.
XX
PF 22-OCT-2001; 2001WO-US047856.
XX
PR 20-OCT-2000; 2000US-0241994P.
PR 08-JUN-2001; 2001US-0296764P.
XX
PA (BIOC-) BIOCARDIA INC.
XX
PI Wohlgemuth J, Fry K, Matcuk G, Altman P, Prentice J, Phillips J;
PI Ly N, Woodward R, Quertermous T, Johnson F;
XX
DR WPI; 2002-636525/68.
XX
PT New system for leukocyte expression profiling, diagnosing a disease, or
PT monitoring (the rate of) progression of a disease, e.g. atherosclerosis
PT or congestive heart failure, comprises diagnostic oligonucleotides.
XX
PS Claim 1; Page 388; 0pp; English.
XX
CC The invention relates to a system for detecting gene expression, which
CC comprises one or two isolated DNA molecules that detect expression of a
CC gene, where the gene corresponds to any of 8143 oligonucleotides
CC (ABZ00010-ABZ08152) each having 50 base pairs (bp). The system is useful
CC for leukocyte expression profiling. It is particularly useful for
CC diagnosing a disease, monitoring (rate of) progression of a disease,
CC predicting therapeutic outcome, determining prognosis for a patient,
CC predicting disease complications in an individual or monitoring response
CC to treatment in an individual. The diseases include cardiac allograft
CC rejection, kidney allograft rejection, liver allograft rejection,
CC atherosclerosis, congestive heart failure, systemic lupus erythematosus,
CC rheumatoid arthritis, osteoarthritis or cytomegalovirus infection
XX
SQ Sequence 50 BP; 9 A; 15 C; 9 G; 17 T; 0 U; 0 Other;

Query Match 5.7%; Score 50; DB 1; Length 50;
Best Local Similarity 100.0%; Pred. No. 0.33;
Matches 50; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```
Qy        530 ACATTCCCTTGGATGTAGTCTGAGGCCCCTTAACTCATCTGTTATCCTGC 579
              ||||||||||||||||||||||||||||||||||||||||||||||||||
Db          1 ACATTCCCTTGGATGTAGTCTGAGGCCCCTTAACTCATCTGTTATCCTGC 50
```

RESULT 3
ADE52413
ID ADE52413 standard; RNA; 48 BP.
XX
AC ADE52413;
XX
DT 29-JAN-2004 (first entry)
XX
DE Wild-type human SOD1 partial RNA sequence.
XX

c 107	20	2.3	21	1	AAQ67477	PCR primer for hum
c 108	20	2.3	21	1	AAV73827	Human SOD1 exon 1
c 109	20	2.3	21	1	ADO55690	Human cytosolic su
110	20	2.3	25	1	ADO43049	Short interfering
111	19.8	2.3	23	1	ABQ75418	CuZn superoxide di
c 112	19.4	2.2	21	1	ADE52404	Target DNA sequenc
113	19.4	2.2	21	1	ADE52403	Target DNA sequenc
c 114	19.4	2.2	22	1	AAN81808	Probe used to iden
115	19.2	2.2	23	1	ADE52415	siRNA p9 sequence
116	19.2	2.2	23	1	ADE52417	siRNA p11 sequence
c 117	19	2.2	19	1	AAN60181	Sequence of probe
c 118	19	2.2	19	1	ABQ73056	Cu/Zn SOD gene rel
119	19	2.2	19	1	ADQ80680	Human cytosolic su
c 120	19	2.2	23	1	ADE52425	siRNA p11 sequence
c 121	19	2.2	23	1	ADE52424	siRNA p10 sequence
c 122	19	2.2	23	1	ADE52423	siRNA p9 sequence
c 123	18.4	2.1	20	1	AAV01384	Superoxide dismuta
c 124	18	2.1	18	1	ADT66494	PCR primer for CuZ
125	17.4	2.0	19	1	ADE52401	Target DNA sequenc
c 126	17.4	2.0	19	1	ADE52402	Target DNA sequenc
127	17.4	2.0	20	1	ABZ91893	Human oligonucleot
128	17.4	2.0	20	1	ABD28123	AA156940-derived o
c 129	17.4	2.0	21	1	ABS98129	Human multidrug re
c 130	17	1.9	17	1	ABT36210	Tumour suppression
131	17	1.9	17	1	ABT39565	Tumour suppression
132	17	1.9	17	1	ADI49574	Human tumour suppr
133	17	1.9	17	1	ADI52307	Human tumour suppr
134	17	1.9	17	1	ACC53333	Human tumour suppr
135	17	1.9	17	1	ACC51634	Human tumour suppr
136	17	1.9	19	1	ABQ75416	CuZn superoxide di
c 137	17	1.9	21	1	AAQ67479	PCR primer for hum
c 138	17	1.9	21	1	AAV73829	Human SOD1 exon 2
c 139	17	1.9	21	1	ADO55692	Human cytosolic su
c 140	17	1.9	21	1	ADO55743	Human cytosolic su
c 141	16.8	1.9	20	1	AAT38674	Mouse SOD-1 exon 4
c 142	16.8	1.9	20	1	AAT93934	Primer for exon 23
143	16.8	1.9	21	1	AAQ67482	PCR primer for hum
144	16.8	1.9	21	1	AAV73832	Human SOD1 exon 4
145	16.8	1.9	21	1	ADO55695	Human cytosolic su
c 146	16.4	1.9	20	1	ADI79800	Human HMG-CoA redu
147	16.4	1.9	20	1	ADI79603	Human HMG-CoA redu
c 148	16	1.8	17	1	AAF91027	Human multi drug r
149	16	1.8	17	1	ADI50808	Human tumour suppr
150	16	1.8	17	1	ADI50799	Human tumour suppr
c 151	16	1.8	18	1	ABK41012	Human obesity-asso
152	16	1.8	19	1	AAL50752	PAL/alpha-tubulin-
153	16	1.8	19	1	ADM83390	Coffea arabica PAL
154	15.6	1.8	17	1	ACF62527	Cancer based on CY
155	15.6	1.8	17	1	ADB21198	MRP1 based cancer
156	15.6	1.8	17	1	ADB88287	Human UGT1A1 varia
157	15.6	1.8	17	1	ADB97270	Human MDR1 variant
158	15.6	1.8	17	1	ADB92461	Human MDR1 variant
c 159	15.4	1.8	17	1	AAF03382	Hammerhead ribozym
c 160	15.4	1.8	17	1	AAF03383	Hammerhead ribozym
161	15	1.7	15	1	AAN71205	Sequence of probe
162	15	1.7	15	1	AAQ61567	Human SOD probe.
163	15	1.7	15	1	ADO43600	Wild type DNA frag
164	15	1.7	15	1	ADO43606	Wild type DNA frag
165	15	1.7	17	1	AAH21294	Human MDR-1 allele
c 166	15	1.7	17	1	AAH21293	Human MDR-1 allele
c 167	15	1.7	17	1	AAF91028	Human multi drug r
168	15	1.7	17	1	ABT38676	Tumour suppression
c 169	15	1.7	17	1	ACF62526	Cancer based on CY
c 170	15	1.7	17	1	ADB21197	MRP1 based cancer
c 171	15	1.7	17	1	ADB88286	Human UGT1A1 varia
c 172	15	1.7	17	1	ADB97269	Human MDR1 variant
c 173	15	1.7	17	1	ADB92460	Human MDR1 variant
c 174	14.4	1.6	17	1	AAA23007	Integrin subunit b
175	14.4	1.6	17	1	AAF05438	Hammerhead ribozym
c 176	14.4	1.6	17	1	AAF03384	Hammerhead ribozym
c 177	14.4	1.6	17	1	AAF03381	Hammerhead ribozym
c 178	14.4	1.6	17	1	ABK02234	Human NOGO DNAzyme
179	14.4	1.6	17	1	ABK02326	Human NOGO DNAzyme
180	14.4	1.6	17	1	ABT37806	Tumour suppression
181	14.4	1.6	17	1	ABT39717	Tumour suppression
182	14.4	1.6	17	1	ACF62525	Cancer based on CY
c 183	14.4	1.6	17	1	ACF62524	Cancer based on CY
c 184	14.4	1.6	17	1	ADB21195	MRP1 based cancer
185	14.4	1.6	17	1	ADB21196	MRP1 based cancer
186	14.4	1.6	17	1	ADB88285	Human UGT1A1 varia
c 187	14.4	1.6	17	1	ADB88284	Human UGT1A1 varia
c 188	14.4	1.6	17	1	ADB97267	Human MDR1 variant
189	14.4	1.6	17	1	ADB97268	Human MDR1 variant
190	14.4	1.6	17	1	ADB92459	Human MDR1 variant
c 191	14.4	1.6	17	1	ADB92458	Human MDR1 variant
192	14.4	1.6	17	1	ADB44992	Tumour suppression
193	14.4	1.6	17	1	ADI48262	Human tumour suppr
c 194	14.4	1.6	17	1	ABZ76052	Antigene inhibitin
c 195	14.4	1.6	18	1	ADK00139	Primer of the inve
196	14	1.6	17	1	AAT81501	Human c-myb hammer
197	14	1.6	17	1	AAT81503	Human c-myb hammer
198	14	1.6	17	1	AAT81500	Human c-myb hammer
199	14	1.6	17	1	AAT81502	Human c-myb hammer
c 200	14	1.6	17	1	ABK01349	Human NOGO Inozyme
c 201	14	1.6	17	1	ABK00484	Human NOGO Hammerh
c 202	14	1.6	17	1	ABK01996	Human NOGO Zinzyme
203	14	1.6	17	1	ACA08316	Necrosis factor ka
204	14	1.6	17	1	ACA09130	NFKB sub-unit modu
205	14	1.6	20	1	ACC40921	Human superoxide d
206	14	1.6	20	1	ACC40922	Human superoxide d
c 207	13.8	1.6	17	1	AAX73200	Mouse flk-1 VEGF r
208	13.8	1.6	17	1	AAV96545	Potato citrate syn
209	13.8	1.6	17	1	AAF04937	Hammerhead ribozym
210	13.8	1.6	17	1	AAF04936	Hammerhead ribozym
211	13.8	1.6	17	1	AAF04935	Hammerhead ribozym
c 212	13.8	1.6	17	1	ABK01097	Human NOGO Inozyme
c 213	13.8	1.6	17	1	ABA80297	MLH1 mutation corr
214	13.8	1.6	17	1	ABA80296	MLH1 mutation corr
c 215	13.8	1.6	17	1	AAF91029	Human multi drug r
216	13.8	1.6	17	1	ABN08968	Human GDMLP-1 17-m
217	13.8	1.6	17	1	ACN03785	WNV Zinzyme substr
218	13.8	1.6	17	1	ADB03682	Human MDZ7 scannin
219	13.8	1.6	17	1	ACD62281	HCV minus strand D
c 220	13.8	1.6	17	1	ADF62659	Human PCCP1 DNA fr
c 221	13.8	1.6	17	1	ADL51188	Human PTGDR substr
c 222	13.8	1.6	17	1	ADL51187	Human PTGDR substr
c 223	13.8	1.6	17	1	ADL51536	Human PTGDR substr
224	13.8	1.6	17	1	ADI85511	HCV DNAzyme substr
225	13.8	1.6	17	1	ACN72058	Human GDMLP-1 prob
226	13.4	1.5	15	1	AAF50921	IGF-I oligonucleot
227	13.4	1.5	15	1	AAF46599	IGFBP3 oligonucleo
228	13.4	1.5	15	1	ADO43607	Mutant DNA fragmen
229	13.4	1.5	15	1	ADO43602	DNA fragment from
c 230	13.4	1.5	16	1	AAS15510	N-acetyltransferas
c 231	13.4	1.5	16	1	ABT13505	Liver regeneration
232	13.4	1.5	16	1	ABZ68236	Probe/PCR primer f
233	13.4	1.5	16	1	ADJ92751	Bacillus cereus sp
234	13	1.5	13	1	AAC88558	Anti-SOD-1 295 cod
235	13	1.5	13	1	AAC88562	Anti-SOD-1 429 cod
236	13	1.5	13	1	AAC88560	Anti-SOD-1 359 cod
237	13	1.5	13	1	AAC88556	Anti-SOD-1 186 cod
238	13	1.5	13	1	ABF54653	Oligonucleotide SE
c 239	13	1.5	13	1	ABF56543	Oligonucleotide SE
240	13	1.5	13	1	ABH01040	Oligonucleotide SE
c 241	13	1.5	13	1	ABH01041	Oligonucleotide SE
c 242	13	1.5	13	1	ABF54652	Oligonucleotide SE
243	13	1.5	13	1	ABF56542	Oligonucleotide SE
244	13	1.5	15	1	AAX54605	Eosinophil peroxid
245	13	1.5	15	1	AAA34052	Human adenosine re
246	13	1.5	15	1	AAF20174	Human eosinophil p
247	13	1.5	15	1	AAF70268	Human DRD2 allele
248	13	1.5	15	1	ABZ95868	Human eosinophil p
249	13	1.5	15	1	ABD19123	Human eosinophil p
c 250	13	1.5	15	1	ADH17043	Taqman probe used
c 251	13	1.5	16	1	ADM56222	Aspergillus oryzae
252	12.8	1.5	16	1	AAC68370	Human IRRR oligonu

GenCore version 5.1.6

OM nucleic - nucleic search, using sw model

Run on: April 14, 2005, 16:45:11 ; Search time 1 Seconds
(without alignments)
8.810 Million cell updates/sec

Title: US-10-672-866-3
Perfect score: 874
Sequence: 1 ctgcagcgtctggggtttcc.....tattaaaagaatccaaattc 874

Scoring table: IDENTITY_NUC
Gapop 10.0 , Gapext 0.5

Searched: 255 seqs, 5040 residues

Total number of hits satisfying chosen parameters: 510

Minimum DB seq length: 8
Maximum DB seq length: 50

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 257 summaries

Database : rng3.seq:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

	Result No.	Score	% Query Match	Length	DB	ID	Description
	1	50	5.7	50	1	ABZ00314	Human leukocyte ge
	2	50	5.7	50	1	ABZ01960	Human leukocyte ge
	3	48	5.5	48	1	ADE52413	Wild-type human SO
	4	48	5.5	48	1	ADO43047	Superoxide dismuta
	5	46.4	5.3	48	1	ADE52414	Human SOD1 mutant
	6	46.4	5.3	48	1	ADO43048	Superoxide dismuta
	7	40	4.6	40	1	AAQ27817	Primer AO39. Synt
	8	35	4.0	35	1	ADE52418	Wild-type human SO
	9	35	4.0	35	1	ADO43055	Superoxide dismuta
	10	28	3.2	28	1	ABK66923	Human gene specifi
c	11	28	3.2	28	1	ABK66924	Human gene specifi
c	12	27	3.1	27	1	ABA94683	Antisense S-oligo
c	13	24	2.7	24	1	AAQ67485	PCR primer for hum
c	14	24	2.7	24	1	AAV73835	Human SOD1 exon 5
c	15	24	2.7	24	1	ADO55698	Human cytosolic su
c	16	23	2.6	23	1	ABA94686	Superoxide dismuta
	17	23	2.6	23	1	ABA94685	Superoxide dismuta
c	18	23	2.6	23	1	ABX12365	Oxidative stress d
	19	23	2.6	23	1	ABX12364	Oxidative stress d
	20	22.4	2.6	25	1	AAD13501	Rat superoxide dis
c	21	22.2	2.5	27	1	AAD29666	Human Zn-SOD ampli
c	22	22.2	2.5	27	1	ADO59161	Human Cu/Zn-supero
c	23	22.2	2.5	27	1	ADO06573	Fusion protein rel
c	24	22.2	2.5	27	1	ADQ74975	Tat-pyridoxal kina
	25	22	2.5	22	1	ADG73925	Human superoxide d
c	26	22	2.5	22	1	ADG73926	Human superoxide d
	27	22	2.5	27	1	ADO59160	Human Cu/Zn-supero
	28	22	2.5	27	1	ADO06572	Fusion protein rel
	29	22	2.5	27	1	ADQ74974	Tat-pyridoxal kina
c	30	21	2.4	21	1	ABQ73054	Cu/Zn SOD gene rel
	31	21	2.4	21	1	ABZ79578	Human superoxide d
	32	21	2.4	21	1	ADD56532	Human gene express
c	33	21	2.4	21	1	ADD56533	Human gene express
	34	21	2.4	21	1	ADT66493	PCR primer for CuZ
c	35	20.4	2.3	22	1	ABQ73057	Cu/Zn SOD gene rel
	36	20	2.3	20	1	AAV01383	Superoxide dismuta
c	37	20	2.3	20	1	ACC40898	Human superoxide d
c	38	20	2.3	20	1	ACC40912	Human superoxide d
c	39	20	2.3	20	1	ACC40914	Human superoxide d
c	40	20	2.3	20	1	ACC40930	Human superoxide d
c	41	20	2.3	20	1	ACC40892	Human superoxide d
c	42	20	2.3	20	1	ACC40897	Human superoxide d
c	43	20	2.3	20	1	ACC40932	Human superoxide d
c	44	20	2.3	20	1	ACC40936	Human superoxide d
c	45	20	2.3	20	1	ACC40893	Human superoxide d
c	46	20	2.3	20	1	ACC40904	Human superoxide d
c	47	20	2.3	20	1	ACC40908	Human superoxide d
c	48	20	2.3	20	1	ACC40911	Human superoxide d
c	49	20	2.3	20	1	ACC40913	Human superoxide d
c	50	20	2.3	20	1	ACC40915	Human superoxide d
c	51	20	2.3	20	1	ACC40940	Human superoxide d
c	52	20	2.3	20	1	ACC40882	Human superoxide d
c	53	20	2.3	20	1	ACC40903	Human superoxide d
c	54	20	2.3	20	1	ACC40920	Human superoxide d
c	55	20	2.3	20	1	ACC40943	Human superoxide d
c	56	20	2.3	20	1	ACC40883	Human superoxide d
c	57	20	2.3	20	1	ACC40887	Human superoxide d
c	58	20	2.3	20	1	ACC40896	Human superoxide d
c	59	20	2.3	20	1	ACC40899	Human superoxide d
c	60	20	2.3	20	1	ACC40928	Human superoxide d
c	61	20	2.3	20	1	ACC40944	Human superoxide d
c	62	20	2.3	20	1	ACC40884	Human superoxide d
c	63	20	2.3	20	1	ACC40886	Human superoxide d
c	64	20	2.3	20	1	ACC40889	Human superoxide d
c	65	20	2.3	20	1	ACC40894	Human superoxide d
c	66	20	2.3	20	1	ACC40931	Human superoxide d
c	67	20	2.3	20	1	ACC40937	Human superoxide d
c	68	20	2.3	20	1	ACC40909	Human superoxide d
c	69	20	2.3	20	1	ACC40942	Human superoxide d
c	70	20	2.3	20	1	ACC40902	Human superoxide d
c	71	20	2.3	20	1	ACC40919	Human superoxide d
c	72	20	2.3	20	1	ACC40921	Human superoxide d
c	73	20	2.3	20	1	ACC40885	Human superoxide d
	74	20	2.3	20	1	ABZ79576	Human superoxide d
c	75	20	2.3	20	1	ABZ79577	Human superoxide d
c	76	20	2.3	20	1	ACC40900	Human superoxide d
c	77	20	2.3	20	1	ACC40938	Human superoxide d
c	78	20	2.3	20	1	ACC40939	Human superoxide d
c	79	20	2.3	20	1	ACC40905	Human superoxide d
c	80	20	2.3	20	1	ACC40918	Human superoxide d
c	81	20	2.3	20	1	ACC40934	Human superoxide d
c	82	20	2.3	20	1	ACC40941	Human superoxide d
c	83	20	2.3	20	1	ACC40895	Human superoxide d
c	84	20	2.3	20	1	ACC40901	Human superoxide d
c	85	20	2.3	20	1	ACC40916	Human superoxide d
c	86	20	2.3	20	1	ACC40929	Human superoxide d
c	87	20	2.3	20	1	ACC40924	Human superoxide d
c	88	20	2.3	20	1	ACC40925	Human superoxide d
c	89	20	2.3	20	1	ACC40926	Human superoxide d
c	90	20	2.3	20	1	ACC40888	Human superoxide d
c	91	20	2.3	20	1	ACC40891	Human superoxide d
c	92	20	2.3	20	1	ACC40917	Human superoxide d
c	93	20	2.3	20	1	ACC40922	Human superoxide d
c	94	20	2.3	20	1	ACC40923	Human superoxide d
c	95	20	2.3	20	1	ACC40935	Human superoxide d
c	96	20	2.3	20	1	ACC40881	Human superoxide d
c	97	20	2.3	20	1	ACC40890	Human superoxide d
c	98	20	2.3	20	1	ACC40906	Human superoxide d
c	99	20	2.3	20	1	ACC40910	Human superoxide d
c	100	20	2.3	20	1	ACC40933	Human superoxide d
c	101	20	2.3	20	1	ACC40880	Human superoxide d
c	102	20	2.3	20	1	ACC40907	Human superoxide d
c	103	20	2.3	20	1	ACC40927	Human superoxide d
c	104	20	2.3	20	1	ADQ80681	Human cytosolic su
	105	20	2.3	20	1	ADR42714	SOD gene analysis
c	106	20	2.3	20	1	ADR42715	SOD gene analysis